

# STIC Search Report Biotech-Chem Library

# STIC Database Tracking Number 1985

TO: Sarvamangala Devi

Art Unit: 1645

Location: REM-3C18

Serial Number: 09/393590

Friday, October 28, 2005

From: Beverly Shears

**Location: Biotech-Chem Library** 

**REM 1A54** 

Phone: 571-272-2528

beverly.shears@uspto.gov

Search Notes	
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From:	Devi, Sarvamangal	a		
Sent: To:	Wednesday, Octob	per 19, 2005 8:42 AM		ing the second of the second o
	STIC-Biotech/Cher	nLib		
Cc:	Shears, Beverly		•	
Subject:	09393590		•	
DI	· ·			
Please ask Ms. BEVERLY			* ;	
Please perform a text se and Pamela Hirtzer.	earch and an invent	ors' name search in app	dication 09/393,590	). Inventors: Elizabeth Moyer
Claim 1. A stable stabilized to comprising a pharmaceutica between pH 5 and pH 6 and	my acceptable bulle	red saline capable of pr	roviding a buffered p	pH range to the formulation
Claim 2. The formulation of Claim 3. The formulation of	claim 1, wherein sai claim 1 wherein sai	d temperature is 5 ± 3 of temperature is 6 ± 3 of temperature is 6 ± 2 of temp	tween 0 and 10 deg degrees centigrade.	•
Ciaim 4. The formulation of (	claim 1. Wherein sai	d buffered nH is nH 5.6.		·
Claim 5. The formulation of Claim 6. The formulation of Claim 7. The formulation of	Claim T. Wherein sa	ia ni imerea coline bec e	nk in the renes of	-114505
bunci, and succinate bullet.				sphate-citrate buffer, acetate
Claim 8. The formulation of Claim 9. The formulation of the range of 10 U-20,000 U/i	CIGILLI O. WHELEHI SA	d botulinum toxin is of a id botulinum toxin is bot	ı botulinum toxin typ tulinum toxin Type E	pe A, B, C1, C2, D, E, F or G. B present at a concentration in
Claim 10. The formulation of				igh molecular weight complex of
700 ± 10% kilodaltons. Claim 11: The formulation of				
				A, present at a concentration in
Claim 13. The formulation of	claim 12, wherein s	aid botulinum toxin Typ	e A is present at a	concentration in the range of
between 100-1000 U/m1. Claim 14. The formulation of serum albumin, recombinent				
seram albumin, recombinant	numan serum amu	מוזבוסה החב מוח		
Claim 16. A stabilized liquid pharmaceutically acceptable	harmaceutical botu liquid buffered salin	linum toxin formulation e capable of providing	for therapeutic use a buffered pH range	in humans, comprising a to the formulation between pH
a therapeutic concentration s	uitable for use in hu	mans of purified botulin	num tovin; and the	tovin formulation to accord
being stable as a liquid when centigrade.				10 and 30 ± 10% degrees
Claim 17. The formulation of Claim 18. The formulation of	claim 16, wherein s	aid buffered nH range is	e nH 5 6	
Claim 19. The fonuulation of	claim 16, wherein s	aid huffered seline has	a nk in the renes of	DH 4.5-6.5
Claim 20. The formulation of succinate buffer.	claim 19, wherein s	aid buffered saline is ph	nosphate buffer, pho	osphate-citrate buffer, or
Claim 21. The formulation of	claim 16, wherein s	aid botulinum toxin is of	f botulinum toxin tvr	DEARCICS DE ENG
Cidin LL. The following of	Ciaiin 21. Wherein Si	aid botulinum toxin is bo	otulinum toxin Type	B present at a concentration of
between 100-20,000 U/ml ±	10%.			
******	•	*****		
Searcher:		Type of Search		**********
Searcher Phone:	•	NA# AA#:		Vendors and cost where applicable
Date Searcher Picked up:		S/L: Oligomer:	-	STN: DIALOG:
Date completed:		Encode/Transl:	_	QUESTEL/ORBIT:
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Date completed: Scarcher: Beverly e 2528	Search Site	Vendors
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(9-90)	Bibliographic	Other

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STRUCTURE FILE UPDATES: 26 OCT 2005 HIGHEST RN 866186-08-5 DICTIONARY FILE UPDATES: 26 OCT 2005 HIGHEST RN 866186-08-5

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \* The CA roles and document type information have been removed from \* \* the IDE default display format and the ED field has been added, \* effective March 20, 2005. A new display format, IDERL, is now \* available and contains the CA role and document type information. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

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http://www.cas.org/ONLINE/UG/regprops.html

- key terms E BOTOX/CN 5 1 SEA ABB=ON PLU=ON BOTOX/CN L1E BOTULIN TOXIN/CN 5 6 SEA ABB=ON PLU=ON BOTULIN TOXIN? /CN L2 8 SEA ABB=ON PLU=ON BOTULIN NEUROTOXIN? /CN L3 L48 SEA ABB=ON PLU=ON BOTULINUM TOXIN? /CN L5 14 SEA ABB=ON PLU=ON BOTULINUM NEUROTOXIN? /CN 134 SEA ABB=ON PLU=ON (BOTULIN A ? OR BOTULIN B ? OR BOTULIN L6 C1 ? OR BOTULIN C2 ? OR BOTULIN D ? OR BOTULIN E ? OR BOTULIN F ?)/CN 2 SEA ABB=ON PLU=ON (BOTULINUM A ? OR BOTULINUM B ? OR L7 BOTULINUM C1 ? OR BOTULINUM C2 ? OR BOTULINUM D ? OR BOTULINUM E ? OR BOTULINUM F ?)/CN 156 SEA ABB=ON PLU=ON L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 L8E PHOSPHATE/CN 9 SEA ABB=ON PLU=ON (PHOSPHATE/CN OR "PHOSPHATE (32PO4)"/CN L9 OR "PHOSPHATE (H2PO4-)"/CN OR "PHOSPHATE (H2PO41-)"/CN OR "PHOSPHATE (HPO42-)"/CN OR "PHOSPHATE (P2074-)"/CN OR "PHOSPHATE (P40123-)"/CN) OR "PHOSPHATE (P60186-)"/CN OR ("PHOSPHATE (PO3-)"/CN OR "PHOSPHATE (PO31-)"/CN OR "PHOSPHATE (PO32-)"/CN) OR "PHOSPHATE (PO43-)"/CN OR

> Shears 571-272-2528 Searcher :

	"PHOSPHATE (PO4H2-)"/CN E CITRATE/CN 5
L10 1	SEA ABB=ON PLU=ON CITRATE/CN E ACETATE/CN 5
L11 1	SEA ABB=ON PLU=ON ACETATE/CN E SUCCINATE/CN 5
L12 1	SEA ABB=ON PLU=ON SUCCINATE/CN
L13 12	SEA ABB=ON PLU=ON L9 OR L10 OR L11 OR L12
	SEA ABB=ON PLU=ON SODIUM CHLORIDE ?/CN
	E BONT/CN 5
L15 6	S (BOTULIN G ? OR BOTULINUM G ?)/CN
L16 161	S L8 OR L15
	E HUMAN SERUM ALBUMIN/CN 5
L21 3	S HUMAN SERUM ALBUMIN ?/CN
	E SERUM ALBUMIN/CN 5
L22 62	S SERUM ALBUMIN ?/CN
•	E GELATINS/CN 5
L23 1	S E3
L24 66	S L21 OR L22 OR L23

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FILE COVERS 1907 - 27 Oct 2005 VOL 143 ISS 18 FILE LAST UPDATED: 26 Oct 2005 (20051026/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

L1	1	SEA FILE=REGISTRY ABB=ON PLU=ON BOTOX/CN
L2	6	SEA FILE=REGISTRY ABB=ON PLU=ON BOTULIN TOXIN? /CN
L3	8	SEA FILE=REGISTRY ABB=ON PLU=ON BOTULIN NEUROTOXIN? /CN
L4	8	SEA FILE=REGISTRY ABB=ON PLU=ON BOTULINUM TOXIN? /CN
L5	14	SEA FILE=REGISTRY ABB=ON PLU=ON BOTULINUM NEUROTOXIN?
		/CN
L6	134	SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULIN A ? OR BOTULIN
		B ? OR BOTULIN C1 ? OR BOTULIN C2 ? OR BOTULIN D ? OR
		BOTULIN E ? OR BOTULIN F ?)/CN
L7	2	SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULINUM A ? OR
		BOTULINUM B ? OR BOTULINUM C1 ? OR BOTULINUM C2 ? OR

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BOTULINUM D ? OR BOTULINUM E ? OR BOTULINUM F ?)/CN
             156 SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3 OR L4 OR
L8
                 L5 OR L6 OR L7
               9 SEA FILE=REGISTRY ABB=ON PLU=ON (PHOSPHATE/CN OR
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                  "PHOSPHATE (H2PO41-)"/CN OR "PHOSPHATE (HPO42-)"/CN OR
                  "PHOSPHATE (P2074-)"/CN OR "PHOSPHATE (P40123-)"/CN) OR
                  "PHOSPHATE (P60186-)"/CN OR ("PHOSPHATE (PO3-)"/CN OR
                  "PHOSPHATE (PO31-)"/CN OR "PHOSPHATE (PO32-)"/CN) OR
                  "PHOSPHATE (PO43-)"/CN OR "PHOSPHATE (PO4H2-)"/CN
L10
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L11
              1 SEA FILE=REGISTRY ABB=ON PLU=ON SUCCINATE/CN
12 SEA FILE=REGISTRY ABB=ON PLU=ON L9 OR L10 OR L11 OR L12
L12
L13
               6 SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULIN G ? OR BOTULINUM
L15
                   G ?)/CN
             161 SEA FILE=REGISTRY ABB=ON PLU=ON L8 OR L15
L16
            4721 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR (BO OR BOTULIN?) (5A
L17
                  ) (NT OR TOXIN OR NEUROTOXIN OR TOX#) OR BOTOX# OR BONT# OR
                 BOTX# OR (BT OR BN OR BNT#) (S) BOTULIN? OR BOTULIN? (3A) (A
                 OR B OR C1 OR C2 OR D OR E OR F OR G)
         1354347 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 OR PHOSPHATE OR
L18
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>> Should read LLGS
OR NACT
                  CITRATE OR ACETATE OR SUCCINATE OR SUCCINIC OR BUTANEDIOIC
                 OR ACETIC
             246 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 AND L18
L19
              63 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND (14) OR NACL OR
L20
                  (NA OR SODIUM) (W) (CL OR CHLORIDE) OR SALINE)
               3 SEA FILE=REGISTRY ABB=ON PLU=ON HUMAN SERUM ALBUMIN ?/CN
L21
              62 SEA FILE=REGISTRY ABB=ON PLU=ON SERUM ALBUMIN ?/CN
L22
              1 SEA FILE=REGISTRY ABB=ON PLU=ON GELATINS/CN
66 SEA FILE=REGISTRY ABB=ON PLU=ON L21 OR L22 OR L23
L23
L24
               8 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND (L24 OR HSA OR
L26
                 ALBUMIN OR GELATIN)
L26 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN
     Entered STN: 08 Jul 2005
                           2005:589208 HCAPLUS
ACCESSION NUMBER:
                           143:93565
DOCUMENT NUMBER:
                           Marker proteins and methods for diagnosing
TITLE:
                           endometrial cancer or phase
                           Colgan, Terence J.; Siu, K. W. Michael; Romaschin,
INVENTOR(S):
                           Alexander D.; Yang, Eric C. C.
PATENT ASSIGNEE(S):
                           Mount Sinai Hospital, Can.; York University;
                           University Health Network
SOURCE:
                           PCT Int. Appl., 199 pp.
                           CODEN: PIXXD2
                           Patent
DOCUMENT TYPE:
                           English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                           KIND
                                               APPLICATION NO.
     PATENT NO.
                                   DATE
                                                _____
     ______
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                                   _____
     WO 2005061725
                           A1 20050707 WO 2004-CA2172
                                                                          20041221
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
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MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
             SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
             VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
             DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC,
             NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                             US 2003-532601P
                                             US 2004-630990P
                                                                 P 20041124
     Methods for detecting endometrial diseases or an endometrium phase in
AB
     a subject are described comprising measuring endometrial markers or
     polynucleotides encoding the markers in a sample from the subject.
     The invention also provides localization or imaging methods for
     endometrial diseases, and kits for carrying out the methods of the
     invention. The invention also contemplates therapeutic applications
     for endometrial diseases employing endometrial markers,
     polynucleotides encoding the markers, and/or binding agents for the
     markers. Thus, isotope-coded affinity tag (ICAT) anal. was used to
     identify differentially expressed proteins in proliferative and
     secretory endometria as well as in normal and cancerous endometrial
     tissues.
                                THERE ARE 8 CITED REFERENCES AVAILABLE FOR
REFERENCE COUNT:
                          8
                                THIS RECORD. ALL CITATIONS AVAILABLE IN THE
                               RE FORMAT
L26 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN
     Entered STN: 20 Jun 2005
ACCESSION NUMBER:
                         2005:531598 HCAPLUS
DOCUMENT NUMBER:
                         143:126710
                         Pilot study of the safety and efficacy of Myobloc
TITLE:
                          (botulinum toxin type
                         B) for treatment of axillary hyperhidrosis
                         Baumann, Leslie; Slezinger, Anele; Halem, Monica;
AUTHOR(S):
                         Vujevich, Justin; Martin, Lucy K.; Black, Laura;
                         Bryde, Joy
CORPORATE SOURCE:
                         Department of Dermatology and Cutaneous Surgery,
                         Division of Cosmetic Dermatology, University of
                         Miami School of Medicine, Miami, FL, USA
                         International Journal of Dermatology (2005),
SOURCE:
                         44(5), 418-424
                         CODEN: IJDEBB; ISSN: 0011-9059
PUBLISHER:
                         Blackwell Publishing Ltd.
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     Background: Botulinum toxin type B
     (BTX-B, Myobloc, San Francisco, CA, USA) was FDA-approved for the
     treatment of cervical dystonia in Dec. 2000. It has since been used
     off-label for the treatment of axillary hyperhidrosis. However, there
     are sparse data in the medical literature evaluating the safety and
     efficacy of Myobloc (botulinum toxin type
     B) for this indication. Objective: To assess the safety,
     efficacy and duration of action of Myobloc (botulinum
     toxin type B) in the treatment of bilateral axillary
     hyperhidrosis. Methods: This study was a double-blinded, randomized,
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Searcher : Shears 571-272-2528

pilot study conducted in an outpatient office setting at a private academic medical center beginning in Nov. 2001. Twenty-three male and

female volunteers between the ages of 18 and 80 were screened for participation; 20 participants with primary axillary hyperhidrosis were enrolled. Participants were injected s.c. with either Myobloc ( botulinum toxin type B) (2500 U, or 0.5 mL, per axilla) or 0.5 mL vehicle (100 mM NaCl, 10 mM succinate, and 0.5 mg/mL human albumin) into bilateral axillae. Participants who received placebo were rolled over and received Myobloc (botulinum toxin type B) at subsequent visits. All participants were followed until sweating returned to baseline levels. This trial was initially conceived as a placebo-controlled study; however, owing to the insufficient size of the placebo group, the placebo arm of this trial was dropped during data anal. The main outcome measures were safety, efficacy, and duration of effect. Results: According to participant assessment of axillary hyperhidrosis improvement (A-HI) and quality of life (A-HQOL) scores and the physician assessment scores, a significant difference was observed in treatment response at Day 30 in the participants receiving Myobloc (botulinum toxin type B) injections. Duration of action ranged from 2.2 to 8.1 mo (mean 5.0 mo). The adverse event profile included bruising, flu-like symptoms, and dry eyes. Conclusion: Myobloc ( botulinum toxin type B) proved to be safe and efficacious for the treatment of bilateral axillary hyperhidrosis. More studies are needed to assess the duration of response using different doses of Myobloc (botulinum toxin type

IT 93384-44-2, Myobloc

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pilot study showed Myobloc was safe and effective with acceptable duration of action and minimal adverse events in treatment of patient with bilateral axillary hyperhidrosis)

REFERENCE COUNT:

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THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

14

Entered STN: 07 Dec 2003

ACCESSION NUMBER: 2003:950462 HCAPLUS

DOCUMENT NUMBER: 140:8814

TITLE: Pharmaceutical preparation of botulinum

neurotoxin

INVENTOR(S): Zabudkin, Alexander F.; Krasnopolsky, Juri M.;

Itkin, Aleksandr M.; Itkin, Dmitry M.

PATENT ASSIGNEE(S):

Ukraine

SOURCE:

U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.			KIN	D -	DATE		1	APPL	ICAT	ION I	мо.		D2	ATE
US 2003 WO 2003				A1 A1		2003 2003			US 2 WO 2					_	0030528 0030528
₩:	CN,	co,	CR,	CU,	CZ,	AU, DE, ID,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,

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LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
             TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                            US 2002-385286P
                                                              P 20020531
AB
     A pharmaceutical preparation of botulinum
     neurotoxins free of human blood products (such as human
     albumin), the preparation comprising a botulinum
     neurotoxin incorporated in phosphatidylcholine liposomes.
     flask is filled with a solution of phosphatidylcholine in ethanol containing
     0.1 g lipid. The solution is subjected to evaporation at 35° until a
     lipid film is formed. He lipid film is then resuspended in 10-L
     sterile 0.9% sodium chloride solution with 7.0-7.4
     phosphate buffer containing 1 mg of botulinum type
     A neurotoxin complex (95-98% purity). After the
     lipid film is successfully resuspended from the flask walls, the
     resulting emulsion is thoroughly mixed for 30 min until homogeneous
     emulsion is produced. Such emulsion is then transferred into a
     homogenizing reactor and the emulsion is homogenized at a pressure of
     60 MPa and a temperature of 30-35^{\circ}. When an optical d. of 0.1-0.12
     is achieved, 25 g lactose is added to the emulsion. The resulting
     emulsion is then sequentially filtered. The resulting sterile
     emulsion is then distributed into vials or ampuls, each containing 0.1 mL
     sterile emulsion. The vials or ampuls are deep frozen at -70^{\circ}
     for 48 h, followed by lyophilization. After lyophilization, the vials
     are hermetically sealed with an atmospheric of inert gas introduced over the
     lyophilized emulsion in the vial.
    93384-43-1, Botulin A 93384-44-2
     , Botulin B 93384-46-4, Botulin
     D 93384-47-5, Botulin E
     107231-12-9, Botulin 107231-13-0,
     Botulin C1 107231-14-1, Botulin
     C2 107231-15-2, Botulin F
     107231-16-3, Botulin G
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (pharmaceutical preparation of botulinum neurotoxin)
L26 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN
    Entered STN: 24 Mar 2000
ACCESSION NUMBER:
                         2000:190943 HCAPLUS
DOCUMENT NUMBER:
                         132:227422
TITLE:
                         Stable liquid formulations of Botulinum
                         toxin
INVENTOR(S):
                         Moyer, Elizabeth; Hirtzer, Pamela
                         Elan Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                         PCT Int. Appl., 36 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
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Searcher : Shears 571-272-2528

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WO 2000015245
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     ES 2181473
                        Т3
                                20030216 ES 1999-945649
                                                                    19990909
     NZ 509349
                                20030829
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     ZA 2001001709
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                                20021128 ZA 2001-1709
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                                20010509
     NO 2001001207
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                                                                    20010309
     LV 12684
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                                20011020
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                                20011231
                                            BG 2001-105435
     BG 105435
                          Α
                                                                    20010410
     LT 4959
                          В
                                20021025
                                            LT 2001-41
                                                                    20010410
                                            US 1998-99870P P 19980911
PRIORITY APPLN. INFO.:
                                            WO 1999-US20912 W 19990909
AB
     The invention includes liquid formulations of botulinum
     toxin that are stable to storage in liquid form at standard
```

The invention includes liquid formulations of botulinum toxin that are stable to storage in liquid form at standard refrigerator temps. for at least 1-2 yr and to storage at higher temps. for at least 6 mo. The invention also includes methods of treatment using such formulations and uses of such formulations in the manufacture of medicaments for various therapeutic and cosmetic treatments. A formulation was prepared containing Botulinum toxin Type B 500±100 LD50U/mL, di-Na succinate 10 mM, NaCl 100 mM, human albumin 0.5 mg/mL, and HCl for pH adjustment.

L26 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 10 Dec 1994

ACCESSION NUMBER: 1994:674169 HCAPLUS

DOCUMENT NUMBER: 121:274169

TITLE: Recovery of type A botulinal toxin following lyophilization

AUTHOR(S): Goodnough, Michael C.; Johnson, Eric A.

CORPORATE SOURCE: Food Res. Inst., Univ. Wisconsin, Madison, WI,

53706, USA

SOURCE: ACS Symposium Series (1994), 567 (Formulation and

Delivery of Proteins and Peptides), 193-203

CODEN: ACSMC8; ISSN: 0097-6156

DOCUMENT TYPE: Journal LANGUAGE: English

AB Type A botulinum toxin is diluted to very

low concns. (ng/mL) for medical use and preserved by lyophilization in a mixture of human serum albumin and sodium chloride at a slightly alkaline pH. This com. process results in considerable loss of activity. In this study, conditions were found that gave >90% recovery of the toxicity following lyophilization of solns. containing 20-1000 mouse 50% LDs (1-50 ng of toxin complex). Ful

recovery of starting toxicity was obtained upon drying 0.1 mL when the pH was maintained below 7.0 and serum albumins or other protein excipients were used as stabilizers without sodium chloride. Possible mechanisms of toxin inactivation were examined and may include aggregation, deamidation, and peptide bond

hydrolysis.

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L26 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 13 Dec 1992

ACCESSION NUMBER: 1992:639677 HCAPLUS

DOCUMENT NUMBER: 117:239677

TITLE: Stabilization of botulinum toxin

type A during lyophilization

AUTHOR(S): Goodnough, Michael C.; Johnson, Eric A.

CORPORATE SOURCE: Dep. Food Microbiol. Toxicol., Univ. Wisconsin,

Madison, WI, 53706, USA

SOURCE: Applied and Environmental Microbiology (1992),

58(10), 3426-8

CODEN: AEMIDF; ISSN: 0099-2240

DOCUMENT TYPE: Journal LANGUAGE: English

AB Botulinum toxin for medical use is diluted to very

low concns. (nanograms per mL); when it is preserved by lyophilization, considerable loss of activity can occur. In the present study, conditions that gave >90% recovery of the toxicity after lyophilization of solns. containing 20 to 1000 mouse 50% LDs per mL were found. Toxicity was recovered upon drying 0.1 mL of toxin solution when the pH was maintained below 7 and bovine or human serum albumins were used as stabilizers. Various other substances tested with albumin, including glucose, sucrose, trehalose, mannitol, glycine, and cellobiose, did not increase recovery on drying.

IT 93384-43-1, Botulin A

RL: PROC (Process)

(stabilization of, during lyophilization)

L26 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 22 Apr 2001

ACCESSION NUMBER: 1966:107065 HCAPLUS

DOCUMENT NUMBER: 64:107065
ORIGINAL REFERENCE NO.: 64:20234b-d

TITLE: The effect of temperature on toxin formation and

toxin stability of Clostridium botulinumn type E in different

environments

AUTHOR(S): Abrahamsson, Kerstin; Gullmar, B.; Molin, N. CORPORATE SOURCE: Swedish Inst. Food Preserv. Res., Goteborg

SOURCE: Canadian Journal of Microbiology (1966), 12(2),

385-94

CODEN: CJMIAZ; ISSN: 0008-4166

DOCUMENT TYPE: Journal LANGUAGE: English

AB C. botulinum type E produced toxin at

temps. between 3° and 30° in a chopped meat medium and in a fish dialyzate. The toxin was produced more rapidly in the meat medium. No toxin was found after 1 year of incubation at 1°. At 3°, slight toxin production was noticed after 120 days, when the inoculum consisted of a mixture of vegetative cells and spores. The lowest concentration of NaCl necessary to inhibit toxin production varied with the incubation temperature and duration of storage. The inhibiting effect of NaCl was more pronounced at a lower temperature Type E spores mixed in fish-meat medium heated for 110 min. at 80° or for 10 min. at 90° produced toxin during prolonged storage at 20% but not after they were heated at 90° for 20 min. Toxin (type E) proved more thermostable in meat broth and fish dialyzate than in phosphate buffer solution or in buffer supplemented with gelatin. In meat broth, the toxin was inactivated after 5 min. at 65°.

L26 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 22 Apr 2001

ACCESSION NUMBER: 1966:5105 HCAPLUS

DOCUMENT NUMBER: 64:5105
ORIGINAL REFERENCE NO.: 64:948e-g

TITLE: Fractionation of proteins in an aqueous medium

INVENTOR(S):
Polson, Alfred

PATENT ASSIGNEE(S): South African Inventions Development Corp.

SOURCE: 9 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1006258		19650929	GB	
PRIORITY APPLN. INFO.:			ZA	19620103

AB A process is described for rendering less soluble or less dispersible in an aqueous liquid a proteinaceous substance by addition of a polyethylene glycol (I) of mol. weight 1500-20,000. The process is useful for fractionating and purifying various types of protein. Human plasma was diluted with an equal volume of H2O, giving a protein concentration of 3.8%

by weight Portions of this soluble (5 ml.) were added to 5-ml. proteins of I (mol. weight 6000) (II) of increasing concentration dissolved in a 1/3M phosphate buffer of pH 7.0. The mixts. were kept at

21° for 30 min. then spun at 14,000 rpm. for 15 min.

At 3% II concentration, the precipitated fraction was fibriongen concentrate. At 8%

II, the  $\gamma$ -globulin fraction was obtained and between 21 and 26%

II, the albumin fraction was obtained contaminated with a

trace of  $\beta$ -globulin. Fractionation could also be achieved at any particular I concentration by successive lowering of the temperature Fractionation

was more readily achieved at lower protein concns. and precipitation proceeded

more readily at low salt concns. Optimally, protein sepns. were carried out at protein concns. of 0.4% and 20°, giving fibrinogen at 0-4% II,  $\gamma$ -globulin at 4-8% II,  $\beta$ -globulin at 8-12% II, and  $\alpha$ -1-and  $\alpha$ -2-globulins and albumins at >12% II. At pH 4.6, the  $\gamma$ -globulins could be optionally separated, and at pH 5.8 the  $\beta$ - and  $\gamma$ -globulins. Other proteins separated similarly were derived from Clostridium novyi toxin, C. botulinum toxin Type D , and pancreactic deoxyribonuclease. The prepns. of pure  $\gamma$ -globulin and fibrinogen are also described.

L1	1	SEA FILE=REGISTRY ABB=ON PLU=ON BOTOX/CN
L2 .		SEA FILE=REGISTRY ABB=ON PLU=ON BOTULIN TOXIN? /CN
L3	8	SEA FILE=REGISTRY ABB=ON PLU=ON BOTULIN NEUROTOXIN? /CN
L4		SEA FILE=REGISTRY ABB=ON PLU=ON BOTULINUM TOXIN? /CN
L5		SEA FILE=REGISTRY ABB=ON PLU=ON BOTULINUM NEUROTOXIN?
		/CN
L6	134	SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULIN A ? OR BOTULIN
110	131	B ? OR BOTULIN C1 ? OR BOTULIN C2 ? OR BOTULIN D ? OR
		BOTULIN E ? OR BOTULIN F ?)/CN
L7	2	SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULINUM A ? OR
ш/	2	BOTULINUM B ? OR BOTULINUM C1 ? OR BOTULINUM C2 ? OR
		BOTULINUM D ? OR BOTULINUM E ? OR BOTULINUM F ?)/CN
$rac{1}{8}$	156	SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3 OR L4 OR
		L5 OR L6 OR L7
L9	9	SEA FILE=REGISTRY ABB=ON PLU=ON (PHOSPHATE/CN OR
		"PHOSPHATE (32PO4)"/CN OR "PHOSPHATE (H2PO4-)"/CN OR
		"PHOSPHATE (H2PO41-)"/CN OR "PHOSPHATE (HPO42-)"/CN OR
		"PHOSPHATE (P2074-)"/CN OR "PHOSPHATE (P40123-)"/CN) OR
		"PHOSPHATE (P60186-)"/CN OR ("PHOSPHATE (PO3-)"/CN OR
		"PHOSPHATE (PO31-)"/CN OR "PHOSPHATE (PO32-)"/CN) OR
		"PHOSPHATE (PO43-)"/CN OR "PHOSPHATE (PO4H2-)"/CN
L10	1	SEA FILE=REGISTRY ABB=ON PLU=ON CITRATE/CN
L11	1	SEA FILE=REGISTRY ABB=ON PLU=ON ACETATE/CN
L12		SEA FILE=REGISTRY ABB=ON PLU=ON SUCCINATE/CN
L13		SEA FILE=REGISTRY ABB=ON PLU=ON L9 OR L10 OR L11 OR L12
L15		SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULIN G ? OR BOTULINUM
113	Ū	G ?)/CN
L16	161	SEA FILE=REGISTRY ABB=ON PLU=ON L8 OR L15
L18		SEA FILE=HCAPLUS ABB=ON PLU=ON L13 OR PHOSPHATE OR
пто	1334347	CITRATE OR ACETATE OR SUCCINATE OR SUCCINIC OR BUTANEDIOIC
		OR ACETIC
L21	2	SEA FILE=REGISTRY ABB=ON PLU=ON HUMAN SERUM ALBUMIN ?/CN
121	3	SEA FILE-REGISTRI ABB-ON PLO-ON HUMAN SERUM ALBUMIN :/ CN
T 22	60	CEN ELLE-DECICEDO ADD-ON DIU-ON CEDUM ALDIMAN 3/CM
L22		SEA FILE=REGISTRY ABB=ON PLU=ON SERUM ALBUMIN ?/CN
L23		SEA FILE=REGISTRY ABB=ON PLU=ON GELATINS/CN
L24		SEA FILE=REGISTRY ABB=ON PLU=ON L21 OR L22 OR L23
L27	6302	SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR (BO OR BOTULIN?) (5A
		) (NT OR TOXIN OR NEUROTOXIN OR TOX#) OR BOTOX# OR BONT# OR
•		BOTX# OR BTX# OR (BT OR BN OR BNT#) (S) BOTULIN? OR BOTULIN? ( "LIA")
		3A) (A OR B OR C1 OR C2 OR D OR E OR F OR G)
L28 .	290	SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND (14) OR NACL OR (NA OR SODIUM) (W) (CL OR CHLORIDE) OR SALINE)
L29	66	SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND (14)OR NACL OR
		(NA OR SODIUM)(W)(CL OR CHLORIDE) OR SALINE)
L30	8	SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND (L24 OR HSA OR
		ALBUMIN OR GELATIN)
L31	0	L30 NOT L26

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L32 16 S L30

L33 11 DUP REM L32 (5 DUPLICATES REMOVED)

L33 ANSWER 1 OF 11 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2005-151958 [16] WPIDS

DOC. NO. CPI:

C2005-049081

TITLE: New benzodiazepine derivatives are calcitonin

> gene-related peptide receptor antagonists useful in treatment of e.g. migraine, headache, tooth pain,

inflammatory bowel disease and arthritis.

DERWENT CLASS:

B02 B05

INVENTOR(S):

BURGEY, C S; STUMP, C A; WILLIAMS, T M

PATENT ASSIGNEE(S): (MERI) MERCK & CO INC

COUNTRY COUNT: 108

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2005000807 A2 20050106 (200516) \* EN 86

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT

KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR

TT TZ UA UG US UZ VC VN YU ZA ZM ZW

### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2005000807	A2	WO 2004-US20206	20040624

PRIORITY APPLN. INFO: US 2003-482674P 20030626

AN 2005-151958 [16] WPIDS

AB W02005000807 A UPAB: 20050308

NOVELTY - A benzodiazepine derivative or its salt or individual diastereomer is new.

DETAILED DESCRIPTION - A benzodiazepine derivative of formula (I) or its salt or individual diastereomer is new;

R1 = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-6C cycloalkyl, heterocycle, (hetero)aryl (all optionally substituted by at least one T) or H;

 $T = (\text{hetero}) \, \text{aryl, heterocycle (both optionally mono--penta-substituted by R4), 1-6C alkyl, 3-6C cycloalkyl, (F)p-1-3C alkyl, halo, OR4, O(CH2) sOR4, CO2R4, CONR10R11, O(CO)NR10R11, N(R4) CONR10R11, N(R10) (CO)R11, N(R10) (CO)OR11, SO2NR10R11, N(R10) SO2R11, S(O)mR10, CN, NR10R11, N(R10) (CO)NR4R11 or O(CO)R4;$ 

R2 and R6 = T or H;

R7 = 0-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-6C cycloalkyl, heterocycle, (hetero)aryl (all optionally substituted by at least one T) or H;

R4, R10 and R11 = 1-6C alkyl, (F)p-1-6C alkyl, 3-6C cycloalkyl, (hetero)aryl, benzyl (all optionally substituted by halo, OH or 1-6C alkoxy) or H;

R5 = H, optionally substituted 1-6C alkyl, 3-6C cycloalkyl, (hetero)aryl, OR4, N(R4)2, CO2R4 or (F)p-1-6C alkyl;

W' = O, NR4 or C(R4)2;

X = C or S;

Y = O, (R4)2, NCN, NSO2CH3 or NCONH2;

R3 = H, optionally substituted 1-3C alkyl, CN or CO2R4;

R10+R11 = azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl or morpholinyl (all optionally mono - penta-substituted by R4);

 $G-J = N, N-C(R5)2, C=C(R5), C=N, C(R5), C(R5)-C(R5)2, \\ C(R5)-C(R5)2-C(R5)2, C=C(R5)-C(R5)2, C(R5)-C(R5)=C(R5), \\ C(R5)-C(R5)2-N(R5), C=C(R5)-N(R5), C(R5)-C(R5)=N, C(R5)-N(R5)-C(R5)2, \\ C=N-C(R5)2, C(R5)-N=C(R5), C(R5)-N(R5)-N(R5), C=N-N(R5), \\ N-C(R5)2-C(R5)2, N-C(R5)=C(R5), N-C(R5)2-N(R5), N-C(R5)=N, \\ N-N(R5)-C(R5)2 \text{ or } N-N=C(R5); \\$ 

p = 0 - 2q+1 (for substituent with q carbons);

m = 0 - 2;

n = 0 or 1;

s = 1 - 3.

Provided that when X is S, Y is O2.

An INDEPENDENT CLAIM is included for treating or preventing migraine headache, cluster headache and headache involving co-administering (I) or its salt and a second agent (A) selected from

serotonin agonist, analgesic, anti-inflammatory agent, anti-hypertensive and anticonvulsants; a second agent (B) selected from anti-anxiety agents and neuroleptics; a second agent (C) selected from beta -blockers and calcium channel blockers; a second agent (D) selected from antidepressant, selective serotonin reuptake inhibitor and NE uptake inhibitor; a second agent selected from

agent (E) selected from vanilloid receptor antagonists, adenosine 1 antagonists, NR2B antagonists, substance P antagonists, granzyme B inhibitors, endothelin antagonists, norepinephrin precursors, nitric oxide synthase inhibitors, neuroleptics, bradykinin antagonists, gap junction inhibitors, AMPA/KA antagonists, sigma receptor agonists, chloride channel enhancers, monoamine oxidase inhibitors, opioid agonists, and leukotriene receptor antagonists; or a second agent (F) selected from anti-emetics, prokinetics and histamine H1 antagonist.

ACTIVITY - Antimigraine; Analgesic; Antiinflammatory; Antidiabetic; Antiasthmatic; Antiarthritic; Antiallergic; Dermatological; Neuroprotective; Gastrointestinal-Gen.; Antipsoriatic; Vasotropic; Immunosuppressive; Antibacterial; Gynecological; Tranquilizer; Vulnerary; Anticonvulsant.

MECHANISM OF ACTION - Calcitonin Gene-related peptide (CGRP) receptor antagonist. N-((3R)-1-Ethyl-2-oxo-5-phenyl-2,3-dihydro-1H-1,4-benzodiazepin-3-yl)-4-(2-oxo-1,4-dihydroquinazolin-3(2H)-yl)piperidine-1-carboxamide (A1) was tested for CGRP receptor antagonistic activity using recombinant receptor functional assay. Cells were plated in complete growth medium ar 85000 cells/well in 96-well poly-D-lysine coated plates and cultured for -19 hours. Cells were washed with phosphate buffered saline (PBS) and then incubated with (A1) for 30 minutes at 37 deg. C and 95% humidity in Cellgro Complete Serum-Free/Low Protein medium with L-glutamine and bovine serum albumin (1 g/l). Human alpha -CGRP was added to the cells at 0.3 nM and incubated at 37 deg. C for 5 minutes. After alpha -CGRP stimulation, the cells were washed with PBS and processed for cAMP determination according to manufacturer's recommended protocol. (A1) Showed IC50 of less than 50 micro M.

USE - For antagonizing CGRP receptor activity in a mammal; in the treatment, control, amelioration or reduction of risk of e.g. headache, migraine, cluster headache (claimed), chronic tension type headache, pain, chronic pain, neurogenic inflammation and inflammatory pain, neuropathic pain, tooth pain, diabetes, non-insulin dependent diabetes mellitus, vascular disorder, inflammation, arthritis, bronchial hyper reactivity, asthma, shock, sepsis, opiate withdrawal syndrome, morphine tolerance, hot flushes, allergic dermatitis, psoriasis, encephalitis, brain trauma, epilepsy, neurodegenerative disease, skin disease, neurogenic cutaneous redness, skin rosaceousness and erythema, inflammatory bowel disease, irritable bowel disease and cystitis.

ADVANTAGE - The compound is potent calcitonin gene-related peptide receptor antagonist and treats CGRP receptor related disease with minimal side effects.

Dwg.0/0

L33 ANSWER 2 OF 11 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2005272780 MEDLINE DOCUMENT NUMBER: PubMed ID: 15869543

botulinum toxin A or B; a second

TITLE: Pilot study of the safety and efficacy of Myobloc (

botulinum toxin type B) for

treatment of axillary hyperhidrosis.

AUTHOR: Baumann Leslie; Slezinger Anele; Halem Monica; Vujevich

Justin; Martin Lucy K; Black Laura; Bryde Joy

CORPORATE SOURCE: Department of Dermatology and Cutaneous Surgery,

Division of Cosmetic Dermatology, University of Miami School of Medicine, 1295 NW 14th Street, South Building

Suite K., Miami, FL 33125, USA.. lsb@derm.net

SOURCE: International journal of dermatology, (2005 May) 44 (5)

418-24.

Journal code: 0243704. ISSN: 0011-9059.

PUB. COUNTRY: United States
DOCUMENT TYPE: (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200508

ENTRY DATE: Entered STN: 20050527

Last Updated on STN: 20050803 Entered Medline: 20050802

AB BACKGROUND: Botulinum toxin type B (

BTX-B, Myobloc, San Francisco, CA, USA) was FDA-approved for the treatment of cervical dystonia in December 2000. It has since been used off-label for the treatment of axillary hyperhidrosis. However, there are sparse data in the medical literature evaluating the safety and efficacy of Myobloc (botulinum toxin type B) for this indication. OBJECTIVE: To assess the safety, efficacy and duration of action of Myobloc (botulinum toxin type B) in the treatment of bilateral axillary hyperhidrosis. METHODS: This study was a double-blinded, randomized, pilot study conducted in an outpatient office setting at a private academic medical center beginning in November 2001. Twenty-three male and female volunteers between the ages of 18 and 80 were screened for participation; 20 participants with primary axillary hyperhidrosis were enrolled. Participants were injected subcutaneously with either Myobloc (botulinum toxin type B) (2500

U, or 0.5 ml, per axilla) or 0.5 ml vehicle (100 mM NaCl, 10 mM succinate, and 0.5 mg/ml human albumin) into

bilateral axillae. Participants who received placebo were rolled over and received Myobloc (botulinum toxin type

B) at subsequent visits. All participants were followed until sweating returned to baseline levels. This trial was initially conceived as a placebo-controlled study; however, owing to the insufficient size of the placebo group, the placebo arm of this trial was dropped during data analysis. The main outcome measures were safety, efficacy, and duration of effect. RESULTS: According to participant assessment of axillary hyperhidrosis improvement (A-HI) and quality of life (A-HQOL) scores and the physician assessment scores, a significant difference was observed in treatment response at Day 30 in the participants receiving Myobloc (botulinum toxin type B) injections. Duration of action ranged from 2.2 to 8.1 months (mean 5.0 months). The adverse event profile included bruising, flu-like symptoms, and dry eyes. CONCLUSION:

Myobloc (botulinum toxin type B) proved to be safe and efficacious for the treatment of bilateral axillary hyperhidrosis. More studies are needed to assess the duration of response using different doses of Myobloc (botulinum

toxin type B).

L33 ANSWER 3 OF 11 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2005207480 MEDLINE

PubMed ID: 15841624 DOCUMENT NUMBER:

TITLE: Double-blind, randomized, placebo-controlled pilot

study of the safety and efficacy of Myobloc (

botulinum toxin type B) for

the treatment of palmar hyperhidrosis.

Comment in: Dermatol Surg. 2005 Sep;31(9 Pt 1):1158. COMMENT:

PubMed ID: 16164873

Baumann Leslie; Slezinger Anele; Halem Monica; Vujevich AUTHOR:

Justin; Mallin Karin; Charles Carlos; Martin Lucy K;

Black Laura; Bryde Joy

Department of Dermatology and Cutaneous CORPORATE SOURCE:

Surgery/Division of Cosmetic Dermatology, University of

Miami, Miami, Florida, USA.. lsb@derm.net

SOURCE: Dermatologic surgery : official publication for

American Society for Dermatologic Surgery [et al.],

(2005 Mar) 31 (3) 263-70.

Journal code: 9504371. ISSN: 1076-0512.

PUB. COUNTRY: DOCUMENT TYPE: United States (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: English

Priority Journals FILE SEGMENT:

200505 ENTRY MONTH:

ENTRY DATE: Entered STN: 20050422

> Last Updated on STN: 20050513 Entered Medline: 20050512

BACKGROUND: Palmar hyperhidrosis is a problem of unknown etiology that AΒ affects patients both socially and professionally. Botulinum toxin type B (Myobloc), approved by the Food and Drug Administration for use in the treatment of cervical dystonia in the United States in December 2000, has subsequently been used

effectively in an off-label indication to treat hyperhidrosis. There are sparse data, however, in the literature evaluating the safety and efficacy of BTX-B for the treatment of palmar hyperhidrosis. OBJECTIVE: We evaluated the safety and efficacy of Myobloc in the treatment of bilateral palmar hyperhidrosis. This was a double-blind, randomized, placebo-controlled study to report on the safety and efficacy of Myobloc. METHODS: Twenty participants (10 men, 10 women)

diagnosed with palmar hyperhidrosis were injected with either Myobloc (5,000 U per palm) or a 1.0 mL vehicle (100 mM NaCl, 10 mM

succinate, and 0.5 mg/mL human albumin) into

bilateral palms (15 Myobloc, 5 placebo). The participants were followed until sweating returned to baseline levels. The main outcome measures were safety, efficacy versus placebo, and duration of effect. RESULTS: A significant difference was found in treatment response at day 30, as determined by participant assessments, between 15 participants injected with Myobloc and 3 participants injected with placebo. The duration of action, calculated in the 17 participants who received Myobloc injections and completed the study, ranged from 2.3 to 4.9 months, with a mean duration of 3.8 months. The single

most reported adverse event was dry mouth or throat, which was reported by 18 of 20 participants. The adverse event profile also included indigestion or heartburn (60%), excessively dry hands (60%), muscle weakness (60%), and decreased grip strength (50%). CONCLUSION: Myobloc proved to be efficacious for the treatment of palmar

hyperhidrosis. Myobloc had a rapid onset, with most participants responding within 1 week. The duration of action ranged from 2.3 to 4.9 months, with a mean of 3.8 months. The adverse event profile

included dry mouth, indigestion or heartburn, excessively dry hands, muscle weakness, and decreased grip strength.

L33 ANSWER 4 OF 11 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:288014 TOXCENTER

COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA14001008814Y

TITLE: Pharmaceutical preparation of botulinum

neurotoxin

AUTHOR(S): Zabudkin, Alexander F.; Krasnopolsky, Juri M.; Itkin,

Aleksandr M.; Itkin, Dmitry M.

PATENT INFORMATION: US 2003224020 Al 4 Dec 2003

SOURCE: (2003) U.S. Pat. Appl. Publ., 8 pp.

COUNTRY: CODEN: USXXCO. COUNTRY: UKRAINE

DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 2003:950462

LANGUAGE: English

ENTRY DATE: Entered STN: 20031209

Last Updated on STN: 20050524

AB A pharmaceutical preparation of botulinum

neurotoxins free of human blood products (such as human
albumin), the preparation comprising a botulinum

neurotoxin incorporated in phosphatidylcholine liposomes. A
flask is filled with a solution of phosphatidylcholine in ethanol containing
0.1 g lipid. The solution is subjected to evaporation at 35° until a

lipid film is formed. He lipid film is then resuspended in 10-L

sterile 0.9% sodium chloride solution with 7.0-7.4 phosphate buffer containing 1 mg of botulinum type

A neurotoxin complex (95-98% purity). After the lipid film is successfully resuspended from the flask walls, the resulting emulsion is thoroughly mixed for 30 min until homogeneous emulsion is produced. Such emulsion is then transferred into a homogenizing reactor and the emulsion is homogenized at a pressure of 60 MPa and a temperature of 30-35°. When an optical d. of 0.1-0.12 is achieved, 25 g lactose is added to the emulsion. The resulting emulsion is then sequentially filtered. The resulting sterile emulsion is then distributed into vials or ampuls, each containing 0.1 mL sterile emulsion. The vials or ampuls are deep frozen at -70°

for 48 h, followed by lyophilization. After lyophilization, the vials are hermetically sealed with an atmospheric of inert gas introduced over the lyophilized emulsion in the vial.

L33 ANSWER 5 OF 11 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-164340 [21] WPIDS

DOC. NO. CPI: C2002-050729

TITLE: Immunoconjugate for increasing anti-tumor activity of

immunotoxin, has a connector molecule attaching a

targeting molecule to an effector molecule, conjugated to one or more polyethylene glycol

molecules.

DERWENT CLASS: A96 B04 D16

INVENTOR(S): LEE, B; NAGATA, S; ONDA, M; PASTAN, I H; TSUTSUMI, Y;

PASTAN, H; KREITMAN, R J; PASTAN, I

PATENT ASSIGNEE(S): (KREI-I) KREITMAN R J; (USSH) US DEPT HEALTH & HUMAN

SERVICES; (LEEB-I) LEE B; (NAGA-I) NAGATA S; (ONDA-I)

ONDA M; (PAST-I) PASTAN I; (TSUT-I) TSUTSUMI Y

COUNTRY COUNT: 97

# PATENT INFORMATION:

PA!	rent	ИО			KI	ID I	DATE	3	V	VEE	ζ		LA	I	PG							
WO	200	1095	5942	 2	A2	200	0112	220	(20	0022	21) *	E	1	 58								
	RW:	ΑT	BE	СН	CY	DE	DK	EΑ	ËS	FI	FR	GB	GH	GM	GR	ΙE	IT	KE	LS	LU	MC	MW
		MZ	NL	OA	PT	SD	SE	SL	SZ	TR	TZ	UG	ZW									
	W:	ΑE	AG	AL	AM	ΑT	ΑU	ΑZ	BA	ВВ	ВG	BR	BY	BZ	CA	CH	CN	CO	CR	CU	CZ	DE
		DK	DM	DZ	EC	EE	ES	FI	GB	GD	GΕ	GH	GM	HR	HU	ID	IL	IN	IS	JP	KE	KG
		ΚP	KR	ΚZ	LC	LK	LR	LS	LT	LU	$r_{\Lambda}$	MA	MD	MG	MK	MN	MW	ΜX	ΜZ	ИО	NZ	PL
		PT	RO	RU	SD	SE	SG	SI	SK	$\mathtt{SL}$	ТJ	TM	TR	TT	ΤZ	UΑ	υG	US	UZ	VN	YU	ZA
		ZW																				
ΑU	200	1069	9762	2	Α	200	112	224	(20	0022	27)											
ΕP	135	1709	9		A2	200	310	15	(20	0036	8)	EN	1									
	R:	ΑT	ΒE	CH	CY	DE	DK	ES	FI	FR	GB	GR	ΙE	ΙT	LI	ΤU	MC	NL	PT	SE	TR	
JP	2004	4503	3512	2	W	200	0402	205	(20	0041	.2)		1	105								
US	2004	4018	3203	3	A1	200	0401	L29	(20	0041	.3)											
ΕP	1353	1709	9		В1	200	0409	915	(20	046	50)	EN	1									
	R:	ΑT	ΒE	CH	CY	DΕ	DK	ES	FI	FR	GB	GR	ΙE	ΙT	LI	LU	MC	NL	PΤ	SĒ	TR	
DE	6010	0564	17		E	200	)41(	21	(20	0046	59)											
EΡ	135											EN										
	R:	ΑT	ΒE	CH	CY	DE	DK	ES	FI	FR	GB	GR	ΙE	ΙT	$_{ m LI}$	LU	MC	NL	PT	SE	TR	
ES	2228	3903	3		Т3	200	)504	116	(20	052	28)											
ΑU	200	1269	9762	2	В2	200	)506	523	(20	0054	15)											
DE	6010	1564	17		Т2	200	1509	122	(20	)N56	521											

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001095942	A2	WO 2001-US18503	20010608
AU 2001069762	Α	AU 2001-69762	20010608
EP 1351709	A2	EP 2001-948294	20010608
		WO 2001-US18503	20010608
JP 2004503512	W	WO 2001-US18503	20010608
		JP 2002-510119	20010608
US 2004018203	A1	WO 2001-US18503	20010608
		US 2002-297337	20021204
EP 1351709	B1	EP 2001-948294	20010608
		WO 2001-US18503	20010608
DE 60105647	Ė	DE 2001-00105647	20010608
		EP 2001-948294	20010608
		WO 2001-US18503	20010608
EP 1351709	B8	EP 2001-948294	20010608
		WO 2001-US18503	20010608
ES 2228903	Т3	EP 2001-948294	20010608
AU 2001269762	B2	AU 2001-269762	20010608
DE 60105647	T2	DE 2001-00105647	20010608
		EP 2001-948294	20010608
		WO 2001-US18503	20010608

# FILING DETAILS:

TENT NO	KIND		PATENT NO
2001069762	A Based	on W	0 2001095942
1351709	A2 Based	on We	2001095942
2004503512	W Based	on We	0 2001095942
1351709	B1 Based	on We	2001095942
	TENT NO 2001069762 1351709 2004503512 1351709	2001069762 A Based 1351709 A2 Based 2004503512 W Based	2001069762 A Based on W0 1351709 A2 Based on W0 2004503512 W Based on W0

DE	60105647	E	Based on	E	EΡ	1351709
			Based on	W	O	2001095942
ΕP	1351709	В8	Based on	W	O	2001095942
ES	2228903	т3	Based on	E	EΡ	1351709
AU	2001269762	B2	Previous	Publ. A	U	2001269762
			Based on	W	10	2001095942
DE	60105647	Т2	Based on	E	EΡ	1351709
			Based on	W	10	2001095942

PRIORITY APPLN. INFO: US 2000-213804P 20000622; US 2000-211331P 20000609; US

2002-297337 20021204

AN 2002-164340 [21] WPIDS AB WO 200195942 A UPAB: 20020403

NOVELTY - A composition (I) comprising a targeting molecule linked to an effector molecule through a connector molecule, and one or more polyethylene glycol (PEG) molecules conjugated to the connector molecule, is new.

ACTIVITY - Cytostatic.

To assess antitumor activity, ATac-4 cells were inoculated subcutaneously in nude mice on day 0. Treatment was started on day 4 when the tumors measured about 100 mm3. Animals were treated intravenously with 3 doses given on days 4, 6 and 8. The control groups received vehicle (phosphate buffered saline (PBS) containing 0.2 % bovine serum albumin (BSA)) or 10 micro g of PEG5K or PEG20K. Native and mutant anti-Tac(Fv)-PE38 (LMB-2) inhibited tumor growth in a dose-dependent manner. Complete regressions, which were defined as disappearance of tumor without regrowth after more than 50 days, were observed in 2 of 5 mice or 1 of 5 mice at the dose of 0.1 mg/kg multiply 3 of native or mutant LMB-2, respectively. At 0.2 mg/kg multiply 3 dose level one of 5 mice administered either native or mutant LMB-2 died from toxicity during the therapeutic period, but complete regressions were observed in all four remaining mice. The antitumor activities of both types of PEGylated LMB-2s were markedly improved. Complete regression was observed in 1 of 5 mice or 2 of 5 mice at the dose of 0.025 mg/kgmultiply 3 of PEG5K- or PEG20K-LMB-2, respectively. At the dose of 0.05 mg/kg multiply 3, PEGylated LMB-2s caused complete regressions lasting over 50 days. Both types of PEGylated LMB-2 showed a 3-4-fold higher anti-tumor activity than unmodified native and mutant LMB-2. In addition, their toxicity to mice was reduced about 6-fold. PEGylation led to a 20-fold increase in therapeutic efficacy, increased LMB-2 blood-residence, which was due to an increase in molecular size and enhanced stability. The plasma half-lives were 5-fold longer with PEG5K-LMB-2 and 8-fold longer with PEG20K-LMB-2 than with unmodified LMB-2s.

MECHANISM OF ACTION - Inhibits or kills growth of target cells. USE - (I) having a targeting moiety and a toxin moiety connected by a connector molecule, where two or more amino acid residues of the connector molecule are conjugated to PEG, is useful for increasing anti-tumor activity of an immunotoxin (claimed). The immunotoxins selectively inhibit or kill cells to which the immunotoxins are targeted by the targeting moiety. They kill or inhibit the growth of cells of CD25+ hematologic malignancies, including e.g. hairy cell leukemia (HCL), cutaneous T-cell lymphoma, chronic lymphocytic leukemia, Hodgkin's disease and adult T-cell leukemia and in vivo inhibit the growth of malignant cells in an organism.

ADVANTAGE - The PEGylated immunotoxin has comparable in vitro specific cytotoxicity against tumor cells, and improved stability,

plasma half-life, antitumor activity, immunogenicity and non-specific toxicity. The PEGylation of the linker or connector portion of an immunotoxin increases the anti-tumor activity of the immunotoxin, while decreasing its toxicity and immunogenicity.

Dwg.0/6

L33 ANSWER 6 OF 11 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

DUPLICATE 3

ACCESSION NUMBER:

2000-271251 [23] WPIDS

DOC. NO. CPI:

C2000-082761

TITLE:

Stable liquid pharmaceutical botulinum toxin formulation, useful for treating

spasticity due to stroke, spinal cord injury, closed head trauma, cerebal palsy, multiple sclerosis, or

Parkinson's disease.

DERWENT CLASS:

B04

INVENTOR(S):
PATENT ASSIGNEE(S):

HIRTZER, P; MOYER, E (ELAN-N) ELAN PHARM INC

COUNTRY COUNT:

85

PATENT INFORMATION:

PAT	CENT	ИО			KII	ND I	OATI	<b>Ξ</b>	V	VEE	ζ		LΑ		?G							
WO	200	001	524	 5	A2	200	000	323	(20	0002	23) ;		1	34	-							
	RW:				CY	DE	DK	ES	FI	FR	GB	GR	ΙE	IT	LU	MC	NL	PT	SE			
	W:	ΑE	AL	AM	ΑТ	ΑU	ΑZ	BA	вв	ВG	BR	BY	CA	CH	CN	CU	CZ	DE	DK	EE	ES	FI
		GB	GD	GE	GH	GM	HR	HU	ID	ΙL	IN	IS	JΡ	ΚE	KG	ΚP	KR	ΚZ	LC	LK	LR	LS
		LT	LU	LV	MD	MG	MK	MN	MW	ΜX	NO	ΝZ	PL	PT	RO	RU	SD	SE	SG	SI	SK	$\mathtt{SL}$
		ТJ	TM	TR	TT	UA	UG	US	UZ	ΛN	YU	zA	zw									
ΑU	995	8214	4		Α	200	000	103	(20	0003	34)											
NO	200	100	120'	7	Α	200	010	509	(20	0013	34)											
	9913						010															
CZ	200	100	056	4	A3	200	010	613	(20	0013	38)											
EΡ	1112	2082	2		A2	200	010	704	(20	0013	38)	EN	1									
	R:	AL	ΑT	ΒE	CH	CY	DE	DK	ES	FI	FR	GB	GR	ΙE	ΙT	LI	LT	LU	$r_{\Lambda}$	MC	MK	NL
		PT	RO	SE	SI																	
	200						011	800	(20	001	53)		. •									
CN	131	690	6		Α	200	011	010	(20	020	07)											
KR	200	1086	638	В	Α	200	0109	910	(20	002	L9)											
	200			В	A2	200	020	128	(20	0022	22)											
ΕP	1112						020		•		•											
	R:	AL	ΑT	BE	CH	CY	DĖ	DK	ES	FI	FR	GB	GR	ΙE	ΙT	$_{ m LI}$	LT	LU	$rac{r}{\Lambda}$	MC	MK	NL
		PT	RO	SE	SI																	
DE	699	0239	96		E	200	0209	905	(20	002	56)											
JP	2002	2524	452	7	W		020	306	(20	0026	56)			46								
ΑU	755	556					0212		•													
	218					20	0302	216	(20	0032	21)											
ZΑ	200	100	170	9	Α	20	0302	226	(20	0032	21)			51								
	5093				Α		030		•													
	200						021		•		•											
TW	574	036			А		0402		-													
IN	200	100		5	P2	20	050	311	(20	005	55)	Eì	1									

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000015245	A2	WO 1999-US20912	19990909
AU 9958214	A	AU 1999-58214	19990909

NO	2001001207	A		1999-US20912	19990909
				2001-1207	20010309
BR	9913585	A		1999-13585	19990909
				1999-US20912	19990909
CZ	2001000564	A3		1999-US20912	19990909
				2001-564	19990909
EΡ	1112082	A2		1999-945649	19990909
				1999-US20912	19990909
SK	2001000313	A3		1999-US20912	19990909
				2001-313	19990909
CN	1316906	A		1999-810739	19990909
KR	2001086388	A		2001-703032	20010309
HU	2001003638	A2	WO	1999-US20912	19990909
•			HU	2001-3638	19990909
EP	1112082	B1	EP	1999-945649	19990909
				1999-US20912	19990909
DE	69902396	E	DE	1999-602396	19990909
			EΡ	1999-945649	19990909
			WO	1999-US20912	19990909
JP	2002524527	W	WO	1999-US20912	19990909
				2000-569829	19990909
ΑU	755556	В	ΑU	1999-58214	19990909
ES	2181473	Т3	ΕP	1999-945649	19990909
ZΑ	2001001709	A	zA	2001-1709	20010228
ΝZ	509349	A	NZ	1999-509349	19990909
			WO	1999-US20912	19990909
ΜX	2001002445	A1	WO	1999-US20912	19990909
			MX	2001-2445	20010308
TW	574036	A	TW	1999-114941	19990831
IN	2001000165	P2	WO	1999-US20912	19990909
			IN	2001-KN165	20010313

# FILING DETAILS:

PAT	TENT NO	KIND	PATENT NO
BR CZ EP	9958214 9913585 2001000564 1112082	A Based on A Based on A3 Based on A2 Based on	WO 2000015245 WO 2000015245 WO 2000015245 WO 2000015245
HU EP	2001000313 2001003638 1112082 69902396	A3 Based on A2 Based on B1 Based on E Based on Based on	WO 2000015245 WO 2000015245 WO 2000015245 EP 1112082 WO 2000015245
AU	2002524527 755556 2181473 509349 2001002445	W Based on B Previous Publ. Based on T3 Based on A Based on Al Based on	WO 2000015245 AU 9958214 WO 2000015245 EP 1112082 WO 2000015245 WO 2000015245

PRIORITY APPLN. INFO: US 1998-99870P 19980911

AN 2000-271251 [23] WPIDS

AB WO 200015245 A UPAB: 20000516

NOVELTY - A stable liquid pharmaceutical botulinum toxin formulation (I), comprising a buffer giving a pH range of 5 to 6 and isolated botulinum toxin, stable at a temperature of 0 to 30 deg. C for at least 1 year, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of treating a patient requiring inhibition of cholinergic input to a muscle, gland, or organ comprising administering (I).

ACTIVITY - Relaxant; cerebroprotective; neuroprotective; antiparkinsonian; analgesic; antimigraine; antiasthmatic.

Twenty-eight patients with a mean age of 50.9 with a confirmed diagnosis of cervical dystonia, received injections of botulinum toxin Type B formulation into

2-4 superficial neck and shoulder muscles with escalating doses (up to 1.5 fold per successive session) over time. Clinical benefit was assessed using the Toronto Western Spasmodic Torticollis Rating Scale (TWSTRS)-Severity test, with 25% reduction in score considered an improvement. Patients participated in the study from 28 to 177 days with a mean time in the study of 71.9 days. Patients were treated with 1 to 3 doses of formulation. Cumulative doses ranged from 1430 U to 12000 U, with individual doses ranging from 300 U to 12000 U. For purposes of clinical assessment, 4 dose groups were defined: 100-800 U (Group A), 900-2399 U (Group B), 2400-5999 U (Group C), and 6000-12000U (Group D). The length of time between dosing sessions ranged as follows: Group A, 13-101 days; Group B, 14-113 days; Group C, 29-177 days; and Group D, 28-177 days. Mean baseline scores were similar in all patients in all treatment groups, and all 4 groups experienced a mean decrease in score (improvement) during the study. Overall, mean percent improvement from baseline and mean response ratio for severity score was greatest in Groups C and D during the study. Measures of mean maximum improvement, mean maximum percent improvement and mean maximum response ratio were greater for the two higher dose groups (8.1 and 6.8 against 2.1 and 3.6 for maximum improvement). The percentage of patients responding to treatment was greater for the two higher dose groups (80 and 78% for C and D, respectively compared to 0 and 27% for A and B, respectively). The results therefore showed a dose-dependent response to botulinum B toxin formulations.

MECHANISM OF ACTION - (I) inhibits cholinergic input into muscles, glands and organs.

USE - The composition is useful for treating spasticity (due to stroke, spinal cord injury, closed head trauma, cerebal palsy, multiple sclerosis, or Parkinson's), blepharospasm, strabismus, hemifacial spasm, dystonia, otitis media, spastic colitis, anismus, urinary detrusor-sphincter dyssynergia, jaw-clenching, and curvature of the spine. (I) is also useful for treatment of myofascial pain, headache associated with migraine, vascular disturbances, neuralgia, neuropathy, arthrotos pain, back pain, hyperhydrosis, rhinnorhea, asthma, excessive salivation, and excessive stomach acid secretion. Dwg.0/0

L33 ANSWER 7 OF 11 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2000272711 EMBASE

TITLE: Botox and dysport are distinct (multiple

letters).

AUTHOR: Madalinski M.; Thumshirn M.

CORPORATE SOURCE: M. Madalinski, ul. Kosciuszki 101-7, 80-421 Gdansk,

Poland. m.h.madalinski@pro.onet.pl

SOURCE: Endoscopy, (2000) Vol. 32, No. 6, pp. 502-503.

Refs: 0

ISSN: 0013-726X CODEN: ENDCAM

COUNTRY: Germany

DOCUMENT TYPE: Journal; Letter

FILE SEGMENT: 030 Pharmacology

037 Drug Literature Index 038 Adverse Reactions Titles

039 Pharmacy

048 Gastroenterology

LANGUAGE: English

ENTRY DATE: Entered STN: 20000817

Last Updated on STN: 20000817

DATA NOT AVAILABLE FOR THIS ACCESSION NUMBER

L33 ANSWER 8 OF 11 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:185698 TOXCENTER COPYRIGHT: Copyright 2005 ACS

DOCUMENT NUMBER:

CA12123274169N

TITLE:

Recovery of type A botulinal toxin following lyophilization

AUTHOR(S):

Goodnough, Michael C.; Johnson, Eric A.

CORPORATE SOURCE:

Food Res. Inst., Univ. Wisconsin, Madison, WI, 53706,

USA.

SOURCE:

ACS Symposium Series, (1994) Vol. 567, No. Formulation and Delivery of Proteins and Peptides, pp. 193-203.

CODEN: ACSMC8. ISSN: 0097-6156.

COUNTRY:

UNITED STATES

DOCUMENT TYPE:

Journal CAPLUS

FILE SEGMENT:

CAPLUS 1994:674169

OTHER SOURCE: LANGUAGE:

English

ENTRY DATE:

Entered STN: 20011116

Last Updated on STN: 20020910

AB Type A botulinum toxin is diluted to very

low concns. (ng/mL) for medical use and preserved by lyophilization in a mixture of human serum albumin and sodium chloride at a slightly alkaline pH. This com. process results in considerable loss of activity. In this study, conditions were found that gave >90% recovery of the toxicity following lyophilization of solns. containing 20-1000 mouse 50% LDs (1-50 ng of toxin complex). Full recovery of starting toxicity was obtained upon drying 0.1 mL when the pH was maintained below 7.0 and serum albumins or other protein excipients were used as stabilizers without sodium chloride. Possible mechanisms of toxin inactivation were examined and may include aggregation, deamidation, and peptide bond

L33 ANSWER 9 OF 11 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

hydrolysis.

1992:172428 TOXCENTER

COPYRIGHT:

Copyright 2005 ACS

DOCUMENT NUMBER:

CA11724239677X

TITLE:

Stabilization of **botulinum toxin** 

type A during lyophilization

AUTHOR(S):

Goodnough, Michael C.; Johnson, Eric A.

CORPORATE SOURCE:

Dep. Food Microbiol. Toxicol., Univ. Wisconsin,

Madison, WI, 53706, USA.

SOURCE:

Applied and Environmental Microbiology, (1992) Vol.

58, No. 10, pp. 3426-8.

CODEN: AEMIDF. ISSN: 0099-2240.

COUNTRY:

UNITED STATES

DOCUMENT TYPE:

Journal

FILE SEGMENT:

CAPLUS

OTHER SOURCE:

CAPLUS 1992:639677

Searcher

Shears

571-272-2528

LANGUAGE: English

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021001

Botulinum toxin for medical use is diluted to very AB low concns. (nanograms per mL); when it is preserved by lyophilization, considerable loss of activity can occur. In the present study, conditions that gave >90% recovery of the toxicity after lyophilization of solns. containing 20 to 1000 mouse 50% LDs per mL were found. Toxicity was recovered upon drying 0.1 mL of toxin solution when the pH was maintained below 7 and bovine or human serum albumins were used as stabilizers. Various other substances tested with albumin, including glucose, sucrose, trehalose, mannitol, glycine, and cellobiose, did not increase recovery on drying.

L33 ANSWER 10 OF 11 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1966:34791 TOXCENTER Copyright 2005 ACS COPYRIGHT: DOCUMENT NUMBER: CA06413107065Y

The effect of temperature on toxin formation and TITLE:

> toxin stability of Clostridium botulinumn type E in different

environments

AUTHOR(S): Abrahamsson, Kerstin; Gullmar, B.; Molin, N. CORPORATE SOURCE: Swedish Inst. Food Preserv. Res., Goteborg.

Canadian Journal of Microbiology, (1966) Vol. 12, No. SOURCE:

2, pp. 385-94.

CODEN: CJMIAZ. ISSN: 0008-4166.

DOCUMENT TYPE: Journal CAPLUS FILE SEGMENT:

OTHER SOURCE: CAPLUS 1966:107065

LANGUAGE: English

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20030513

C. botulinum type  $\mathbf{E}$  produced toxin at temps. between 3° and 30° in a chopped meat medium and in a fish dialyzate. The toxin was produced more rapidly in the meat medium. No toxin was found after 1 year of incubation at 1°. At 3°, slight toxin production was noticed after 120 days, when the inoculum consisted of a mixture of vegetative cells and spores. The lowest concentration of  ${\tt NaCl}$  necessary to inhibit toxin production varied with the incubation temperature and duration of storage. The inhibiting effect of NaCl was more pronounced at a lower temperature Type E spores mixed in fish-meat medium heated for 110 min. at 80° or for 10 min. at 90° produced toxin during prolonged storage at 20% but not after they were heated at 90° for 20 min. Toxin (type E) proved more thermostable in meat broth and fish dialyzate than in phosphate buffer solution or in buffer supplemented with gelatin. In meat broth, the toxin was inactivated after 5 min. at 65°.

L33 ANSWER 11 OF 11 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1966:29482 TOXCENTER COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA06401005105U

TITLE: Fractionation of proteins in an aqueous medium

AUTHOR(S): Polson, Alfred

CORPORATE SOURCE: ASSIGNEE: South African Inventions Development Corp.

PATENT INFORMATION: GB 1006258 29 Sep 1965

SOURCE: (1965)
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1966:5105 ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20040511

AB A process is described for rendering less soluble or less dispersible in an aqueous liquid a proteinaceous substance by addition of a polyethylene glycol (I) of mol. weight 1500-20,000. The process is useful for fractionating and purifying various types of protein. Human plasma was diluted with an equal volume of H2O, giving a protein concentration of

3.8%

by weight Portions of this soluble (5 ml.) were added to 5-ml. proteins of I (mol. weight 6000) (II) of increasing concentration dissolved in a 1/3M phosphate buffer of pH 7.0. The mixts. were kept at 21° for 30 min. then spun at 14,000 rpm. for 15 min.

At 3% II concentration, the precipitated fraction was fibriongen concentrate. At 8%

II, the  $\gamma$ -globulin fraction was obtained and between 21 and 26%

II, the albumin fraction was obtained contaminated with a

trace of  $\beta\text{-globulin.}$  Fractionation could also be achieved at any particular I concentration by successive lowering of the temperature Fractionation

was more readily achieved at lower protein concns. and precipitation proceeded

more readily at low salt concns. Optimally, protein sepns. were carried out at protein concns. of 0.4% and 20°, giving fibrinogen at 0-4% II,  $\gamma$ -globulin at 4-8% II,  $\beta$ -globulin at 8-12% II, and  $\alpha$ -1-and  $\alpha$ -2-globulins and **albumins** at >12% II. At pH 4.6, the  $\gamma$ -globulins could be optionally separated, and at pH 5.8 the  $\beta$ - and  $\gamma$ -globulins. Other proteins separated similarly were derived from Clostridium novyi toxin, C. botulinum toxin Type D

, and pancreactic deoxyribonuclease. The prepns. of pure  $\gamma\text{-globulin}$  and fibrinogen are also described.

FILE 'HCAPLUS' ENTERED AT 11:59:55 ON 27 OCT 2005

L34 22 S L29 AND BUFFER?

L35 16 S L29 AND (TEMP OR TEMPERATURE)

L36 28 S (L34 OR L35) NOT L30

L36 ANSWER 1 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:983609 HCAPLUS

DOCUMENT NUMBER: 143:272525

TITLE: Composition and methods for topical application

and transdermal delivery of botulinum

toxin

INVENTOR(S): Dake, Michael D.; Waugh, Jacob M. PATENT ASSIGNEE(S): Essentia Biosystems, Inc., USA SOURCE: U.S. Pat. Appl. Publ., 28 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
US 2005196414 A1 20050908 US 2005-72026 20050303

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WO 2005084410
                          A2
                                20050915
                                            WO 2005-US7524
                                                                    20050303
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
             MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
             SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
             UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
             DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC,
             NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                            US 2004-550015P
                                                               P 20040303
PRIORITY APPLN. INFO.:
AB
     A composition for topical application of a botulinum
     toxin (including botulinum toxin derivs.)
     comprises a botulinum toxin and
     a carrier comprising a polymeric backbone having attached pos.
     charged branching groups. The invention also relates to methods for
     reducing muscle paralysis and other conditions that may be treated
     with a botulinum toxin, particularly
     paralysis of s.c., and most particularly, facial, muscles, by
     topically applying an effective amount of the botulinum
     toxin and carrier, in conjunction, to the subject's skin or
     epithelium. Kits for administration are also described. For example,
     topical botulinum toxin with a peptidyl
     carrier was prepared The pos. charged backbone was assembled by
     conjugating -Gly3Arg7 to polylysine (MW 112,000) via the carboxy of
     the terminal glycine to free amines of the lysine side chains at a
     degree of saturation of 18 % (i.e., 18 out of each 100 lysine residues is
     conjugated to a -Gly3Arg7). An aliquot of botulinum
     toxin A was biotinylated with a calculated 12-fold molar
     excess of sulfo-NHS-LC biotin. Biotinylated botulinum
     toxin A 2.0 unit per aliquot (i.e. 20 U total) and
     peptidyl carrier at a calculated MW ratio of 4:1 were mixed to homogeneity
     and diluted to 600 \mu L with phosphate buffered
     saline. The resulting composition was mixed to homogeneity with
     5.4 mL of Cetaphil and aliquoted in 200 µL portions. Topical
     application of above composition demonstrated that the peptidyl carrier can
     transport a therapeutically effective amount of botulinum
     toxin across skin without covalent modification of the
     therapeutic.
L36 ANSWER 2 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         2004:1003887 HCAPLUS
DOCUMENT NUMBER:
                         142:128923
                         Factors Affecting Autocatalysis of
TITLE:
                         Botulinum A Neurotoxin
                         Light Chain
                         Ashraf Ahmed, S.; Ludivico, Matthew L.; Smith,
AUTHOR(S):
                         Leonard A.
                         Department of Immunology and Molecular Biology,
CORPORATE SOURCE:
                         Division of Toxinology and Aerobiology, United
                         States Army Medical Research Institute of
                         Infectious Diseases, Fort Detrick, MD, 21702, USA
                         Protein Journal (2004), 23(7), 445-451
SOURCE:
                         CODEN: PJROAH; ISSN: 1572-3887
                         Springer Science+Business Media, Inc.
PUBLISHER:
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DOCUMENT TYPE: Journal LANGUAGE: English

The light chain of botulinum neurotoxin serotype A undergoes autocatalytic fragmentation into two major peptides during purification and storage by both intermol. and intramol. mechanisms. In this study, the authors investigated the effects of buffers and salts on this autocatalytic reaction in the presence and absence of zinc chloride. In the presence of zinc chloride, the fragmentation reaction was enhanced in each of acetate, MES, HEPES and phosphate buffers with maximum occurring in acetate when compared to those in the absence of zinc chloride. Adding sodium chloride in phosphate buffer in the presence of zinc chloride increased the extent of proteolysis. Irresp. of the presence

of zinc chloride, adding sodium chloride or potassium chloride in phosphate buffer elicited an

addnl. proteolytic reaction. Higher concns. of sodium phosphate buffer enhanced the autocatalytic reaction

in the absence of zinc chloride. In contrast, in the presence of zinc chloride, higher concns. of sodium phosphate decreased the autocatalytic reaction. Optimum pH of autocatalysis was not affected significantly by the absence or presence of zinc chloride. Like zinc chloride, other chlorides of divalent metals, such as magnesium, cobalt, iron and calcium also enhanced the autocatalytic reaction. Polyols such as ethylene glycol protected the light chain from fragmentation. Exposure of light chain to UV radiation led to enhanced fragmentation. To avoid fragmentation, the protein should be stored frozen in a low concentration buffer of neutral or higher pH devoid of any metal. The authors' results provide a choice of

buffers and salts for isolation, purification and storage of intact botulinum neurotoxin serotype A light

chain.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L36 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

2003:905843 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:6042

Combined effects of ionizing-irradiation and TITLE:

different environments on Clostridium

botulinum type E spores

Lim, Y. H.; Hamdy, M. K.; Toledo, R. T. AUTHOR(S):

Department of Food Science and Technology, CORPORATE SOURCE: University of Georgia, Athens, GA, 30602, USA

SOURCE: International Journal of Food Microbiology (2003),

89(2-3), 251-263

CODEN: IJFMDD; ISSN: 0168-1605

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

We examined the combined effects of  $\gamma$ -radiation (24 °C) on spores of Clostridium botulinum-type Eklund strain suspended in different gas-saturated Na-phosphate buffers in the absence or presence of protectors or sensitizers. Response surface methodol. (RSM) was also used to ascertain the effects of radiation on the recovery of spores using a medium containing various levels of NaCl or Na-thioglycolate. The former (<0.5%) decreased viable

> Searcher : Shears 571-272-2528

spore counts, but the latter (0.15%) did not. Irradiation inactivation of

Eklund spores was most effective in air-saturated buffers compared to N2O and N2 gas. The Na2-EDTA (0.01 M) was the most efficient radioprotector of spores due to its reactivity toward hydroxy radicals, followed by t-butanol (0.1 M) in NO2 or N2-saturated buffers, resp. Catalase (10.0 mg ml-1) and dl-cysteine (0.1 mM) sensitized the spores during irradiated N2O or N2-saturated buffers, and NaCl (0.01 M) only sensitized spores in N2 environment. Spores frozen at -75°C for 30 days and thawed prior to use were more sensitive to radiation damage compared to freshly prepared spores. Glycerol (15%), in Na-phosphate buffer (pH 7.0, 0.06 M), protected Eklund spores and increased the number of spores from 106 to 1011 colony forming unit (CFU) ml-1, and enhanced their radiosensitivities. Seven strains of C. botulinum type E were screened for plasmids and strain BL764 had two plasmids (15.8 and 46.8 mDa), BL4028 also had two (4.4 and 13.2 mDa), BL4850 contained only one (4.9 mDa), whereas EQA, BL211, Eklund, and Beluga had none. γ-Radiation (10 kGy, absorbed dose) cured the 15.8-mDa plasmid in strain BL764, but its absence yielded no changes in toxigenicity.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L36 ANSWER 4 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:491426 HCAPLUS

DOCUMENT NUMBER: 135:43124

TITLE: Method of immunoenzymic detection of

botulin toxin and apparatus for

the detection

INVENTOR(S): Trojan, Czeslaw; Kuczek, Marian

PATENT ASSIGNEE(S): Wyzsza Szkola Oficerska im. Tadeusza Kosciuszki,

Pol.

SOURCE: Pol., 4 pp.

CODEN: POXXA7

DOCUMENT TYPE: Patent LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PL 179790	В1	20001031	PL 1994-305816	19941109		
PRIORITY APPLN. INFO.:			PL 1994-305816	19941109		

As emiquant. field method for the immunoenzymic detection of botulin toxin on glass fiber paper Whatman GF/A is described. Anti-botulotoxin antibodies labeled with fluorescein isothiocyanate (FITC) are fixed on the dry paper in a vertical line. The crossing horizontal line made under UV lamp contains similarly FITC-labeled antibodies with botulin toxin or toxoid. After drying the paper is saturated with 1% casein. On the prepared paper, a drop of the aqueous extract of the sample is applied, followed by 0.5 mL stabilized anti-botulotoxin antibodies labeled with peroxidase (1 µg/mL in 0.1 M phosphate buffer pH 6.5). After soaking of the solns, into the paper and drying, the paper surface is washed with 1% aqueous NaCl with 0.01% cetylpyrimidine HCl detergent in 0.01% phosphate buffer pH 6.5. Subsequently a drop of alc. solution of the chromogenic substrate (tetramethylbenzidine chloride or sulfate) and

H2O2 are added. The developed color is visually judged pos. or neg. for the **botulin toxin** presence it the sample examined A simple box device for the test execution is described.

L36 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:425354 HCAPLUS

DOCUMENT NUMBER: 131:224672

TITLE: Detection of sparse botulinum

toxin A binding sites using
fluorescent latex microspheres

AUTHOR(S): Crosland, Richard D.; Canziani, Gabriela A. CORPORATE SOURCE: Toxinology Division, United States Army Medical

Research Institute of Infectious Diseases,

Frederick, MD, 21702, USA

SOURCE: Journal of Histotechnology (1999), 22(2), 113-115

CODEN: JOHIDN; ISSN: 0147-8885

PUBLISHER: National Society for Histotechnology

DOCUMENT TYPE: Journal LANGUAGE: English

AB The most potent toxins known are produced by strains of Clostridium botulinum. To paralyze the vertebrate neuromuscular junction, the toxins bind selectively to nerve endings, translocate into the presynaptic terminal, and hydrolyze proteins of the exocytotic apparatus, thus inhibiting the release of acetylcholine. Our goal was to develop a convenient, reliable technique to detect specific binding of

botulinum toxin A to its targets, a

technique that could be easily modified to detect the binding sites of other ligands as well. Our method utilized fluorescent latex microspheres and is theor. capable of detecting a single binding site at the light microscopic level. Nonspecific binding sites on  $7-\mu m$  thick sections of unfixed, cryosectioned mouse diaphragm were first blocked with 20% goat serum in **phosphate-buffered** 

saline (GS/PBS). We incubated the diaphragm for 1 h at

22° with various concns. of botulinum toxin

A in GS/PBS, followed by incubation with rabbit anti-

botulinum toxin A antiserum,

biotin-labeled goat anti-rabbit antibody, and finally avidin-labeled, 0.03  $\mu$ m diameter, fluorescent latex microspheres. As expected, binding was localized to the area of the neuromuscular junction. Binding was also observed in association with axons innervating some junctions. We could detect binding on diaphragms that were exposed to as little as 10 pM botulinum toxin A,

which is in the low range of effective in vitro doses that block neuromuscular transmission. This is a convenient, sensitive, and specific technique for detecting **botulinum toxin** 

A binding sites that is easily modifiable for the detection of binding sites of other ligands as well.

REFERENCE COUNT:

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 6 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

12

ACCESSION NUMBER: 1997:636107 HCAPLUS

DOCUMENT NUMBER: 127:292350

TITLE: Low-acid, high-moisture processed cheese spread

and method of making

INVENTOR(S): Adrianson, Tim M.; Brown, Alpheus I., Jr.; Busk,

G. Curtis, Jr.; Gunther, Stephen A.; Huether, Karen D.; Mann, Joseph W.; Yoss, James K.

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PATENT ASSIGNEE(S): Nabisco, Inc., USA

SOURCE: U.S., 11 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5670197	Α	19970923	US 1995-536406	19950929
PRIORITY APPLN. INFO.:			US 1995-536406	19950929

High-moisture, high-pH, shelf-stable cheese spreads containing cheese, AB preferably a cheese having a pH of 5.4 or lower such as Swiss, Cheddar, American, mozzarella, skim milk cheese, or cheese mixts., water sufficient to provide a total moisture of from 51 to 58% and a pH of from 5.3 to 6.0 are preserved by adding sodium chloride, a phosphate salt, sodium citrate , and sodium lactate in sufficient amts. to maintain the composition free from the growth of Clostridium botulinum and the production of toxin by those organisms during room temperature storage for a period of at least 180 days, preferably 300 days. Some embodiments contain 1 to 2% sodium citrate, 1 to 2% sodium lactate, and a combined level of dibasic sodium phosphate and sodium chloride ranging between 1.3 and 2.2%, and have a moisture content of 52 to 55%, and an overall pH of about 5.3 to 5.6.

L36 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:998457 HCAPLUS

DOCUMENT NUMBER: 124:54039

TITLE: Growth of proteolytic Clostridium botulinum in

process cheese products: I. Data acquisition for

modeling the influence of pH, sodium chloride, emulsifying salts, fat dry

basis, and temperature

AUTHOR(S): Ter Steeg, Pieter F.; Cuppers, Henk G. A. M.;

Hellemons, Johan C.; Rijke, Guus

CORPORATE SOURCE: Unilever Research Laboratorium, Vlaardingen, 3133

AT, Neth.

SOURCE: Journal of Food Protection (1995), 58(10), 1091-9

CODEN: JFPRDR; ISSN: 0362-028X

PUBLISHER: International Association of Milk, Food and

Environmental Sanitarians

DOCUMENT TYPE: Journal LANGUAGE: English

AB Outgrowth of proteolytic Clostridum botulinum type A and B spores in pasteurized process cheese products was

and **B** spores in pasteurized process cheese products was assessed to acquire data for improved models of botulinum stability.

High-moisture (58.5%) products were made with different levels of pH (5.45 to 5.9), sodium chloride (1.1 to 2.8%,

wt/wt) and citrates or phosphates as emulsifying salts (1.5 to 2%, wt/wt), and held at 15 to 30°C. Supplemental

expts. were carried out to address the effect of lactic acid concentration originating from the nonfat and 50% fat dry basis (FDB) cheese raw

materials, of moisture (50 to 69%), and of total fat (0.1 to 41%, wt/wt). Colony counts were recorded as substitutes for the

traditional times to toxin formation. In the last exptl. series a

polyclonal ELISA against type A and B toxin was carried out as an alternative to the mouse challenge test. Very low spore levels could lead to detectable toxin formation. Temperature strongly influenced outgrowth. At 18°C outgrowth only occurred in 3 mo at favorable aw (0.966) and pH (5.9). At 25°C, outgrowth occurred within one week under favorable conditions. No growth occurred within 3 mo when aw and pH were 0.95 and 5.55 resp. Polyphosphate appeared to be more inhibitory than citrate. Moisture is a frequently used indicator of botulinum stability, but when the FDB deviates from 50%, moisture is actually a poor indicator. Components such as NaCl, emulsifying salts, and lactic acid determine stability. Fat does not contribute to stability. Increased fat levels can reduce moisture without a concomitant increase in stability.

L36 ANSWER 8 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:679280 HCAPLUS

DOCUMENT NUMBER: 121:279280

TITLE: Inhibitory potential of four-carbon dicarboxylic

acids on Clostridium botulinum spores in an

uncured turkey product

AUTHOR(S): Miller, Arthur J.; Call, Jeffrey E.

CORPORATE SOURCE: Eastern Regional Research Center, Agricultural

Research Service, Philadelphia, PA, 19118, USA Journal of Food Protection (1994), 57(8), 679-83

CODEN: JFPRDR; ISSN: 0362-028X

DOCUMENT TYPE: Journal LANGUAGE: English

SOURCE:

Organic acids offer promising options for the food industry in its attempt to ensure product safety and to meet consumer demand for minimally processed foods. In this study, four-carbon dicarboxylic acids were individually screened for their inhibitory potential against proteolytic Clostridium botulinum spores. Ground turkey breast meat was formulated with 1.4% sodium chloride (NaCl), 0.3% sodium pyrophosphate, 2% organic acid, 8% water, and 500 spores/q of a six-strain mixture of proteolytic C. botulinum. Samples were adjusted to pH 6. Ten g of product in vacuum packages were heated in 75° water for 20 min, cooled, and incubated for 0 to 25 days at 28°. Botulinal neurotoxin was detected at two days in control samples (0% acid) and at five days in 2% malic acid (0.13 M), aspartic (0.13 M), tartaric (0.12 M), succinic (0.15 M), and fumaric (0.15 M) samples. Toxin was undetected at 25 days in samples treated with maleic acid (0.15 M). Maleic acid reduced total aerobic bacteria and lactic acid organisms in temperature-abused product, compared to controls. Further systematic investigation of these and related compds. with prior approval for food-use may demonstrate previously unrecognized antibacterial potential.

L36 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:598192 HCAPLUS

DOCUMENT NUMBER: 121:198192

TITLE: Peptide substrate specificity and properties of

the zinc-endopeptidase activity of

botulinum type B

neurotoxin

AUTHOR(S): Shone, Clifford C.; Roberts, April K.

CORPORATE SOURCE: Protein Toxins Section, Cent. Appl. Microbiol.

Res., Salisbury, SP4 OJG, UK

SOURCE: European Journal of Biochemistry (1994), 225(1),

263-70

CODEN: EJBCAI; ISSN: 0014-2956

DOCUMENT TYPE: Journal LANGUAGE: English

AB Clostridium botulinum type B neurotoxin

has been shown to be a zinc endopeptidase specific for vesicle-associated membrane protein (VAMP). A synthetic peptide of human/rat VAMP-2

[VAMP-2-(60-94)] is cleaved by the neurotoxin with the same

specificity as that demonstrated for the membrane-associated protein (at the Gln76-Phe77 bond) and has been used to study the properties of the endopeptidase activity of the neurotoxin. Cleavage of the VAMP-2

peptide was demonstrated by both botulinum type B

**neurotoxin** (Km = 3.3 + 10-4 M) and by its purified light subunit (Km = 3.5 + 10-4 M). The endopeptidase displayed a pH optimum of 7.0-7.5 and was inhibited by greater than 0.2 M

NaCl and greater than 0.05 M sodium phosphate.

Neurotoxin which had been inactivated by dialysis against EDTA could be re-activated by incubation with various divalent cations, notably Zn2+ and Cu2+. The substrate specificity of **botulinum** type

B neurotoxin was studied using various analogs of

VAMP-2 (60-94). The neurotoxin cleaved selectively to the N-terminal side of phenylalanine and tyrosine; no activity was observed with either leucine, valine or alanine in the P1' position. The properties of the P1 amino acid were less critical; the neurotoxin cleaving the C-terminus of glutamine, asparagine and alanine. A substrate analog with valine in the P1 position corresponding to the sequence of rat VAMP-1 was not cleaved. The rate of cleavage of a substrate analog representing the sequence of human VAMP-1, however, was more than twofold that of the VAMP-2 peptide. The properties and substrate specificity of

botulinum type B neurotoxin suggest that

the toxin represents a novel class of endopeptidase which requires a specific peptide substrate conformation for the expression of proteolytic activity.

L36 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:190022 HCAPLUS

DOCUMENT NUMBER: 120:190022

TITLE: Comparison of organic acid salts for Clostridium

botulinum control in an uncured turkey product Miller, Arthur J.; Call, Jeffrey E.; Whiting,

Richard C.

CORPORATE SOURCE: Eastern Reg. Res. Cent., Agric. Res. Serv.,

Philadelphia, PA, 19118, USA

SOURCE: Journal of Food Protection (1993), 56(11), 958-62

CODEN: JFPRDR; ISSN: 0362-028X

DOCUMENT TYPE: Journal LANGUAGE: English

AUTHOR(S):

Health concerns have led consumers toward purchasing nitrite-free, low-salt meat and poultry products. Lacking these barriers to control growth of bacterial pathogens, such products carry heightened risks for botulism, especially if storage temperature is abused. To address this threat, 5 organic acid salts were evaluated as potential antibotulinal agents. Ground turkey breast was formulated with 1.4% NaCl, 0.3% sodium pyrophosphate, 0-6% organic acid salts, 10% ice, and 500 spores per g of a 6-strain mixture of proteolytic C. botulinum. Vacuum-packaged product (10 g) was heated in 75° water for 20 min, cooled, and incubated for up to 18 days at 28°. Botulinal neurotoxin was detected by

mouse bioassay at 2 days in samples which lacked any of the test compds. Samples containing 2% acid salt developed neurotoxin, which was detected at 2, 2, 4, 5, and 5 days for pyruvate, citrate, lactate, acetate, and propionate, resp. With 6% acid salt addns., samples remained neurotoxin free until 7 days with pyruvate, 18 days with citrate, and >18 days for the remaining compds. Monocarboxylic acid salts exhibited antibotulinal activity related to their dissociation consts. (pKa). Citrate did not fit this pattern, however, suggesting a different mechanism of action. This study reveals that a variety of organic acid salts possess activity that can be used alone or possibly in combination to enhance the safety of nitrite-free turkey products.

L36 ANSWER 11 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1989:630844 HCAPLUS

DOCUMENT NUMBER: 111:230844

TITLE: Sodium lactate delays toxin production

by Clostridium botulinum in cook-in-bag

turkey products

AUTHOR(S): Maas, M. R.; Glass, K. A.; Doyle, M. P.

CORPORATE SOURCE: Oscar Mayer Foods Corp., Madison, WI, 53707, USA

SOURCE: Applied and Environmental Microbiology (1989),

55(9), 2226-9

CODEN: AEMIDF; ISSN: 0099-2240

DOCUMENT TYPE: Journal LANGUAGE: English

AB Comminuted raw turkey, containing 1.4% NaCl, 0.3% Na phosphate, and 0 (control), 2.0, 2.5, 3.0, or 3.5% Na lactate,

was inoculated with a 10-strain mixture of proteolytic type A

and B C. botulinum spores. The inoculated turkey

was vacuum packaged and cooked by immersion in heated water to an

internal temperature of 71.1°. Samples were incubated at

27° for up to 10 days. Five samples per treatment were examined

for botulinal toxin at specific intervals. Na

lactate had a concentration-dependent antibotulinal effect. Processed turkey

containing 0, 2.0, 2.5, 3.0, or 3.5% Na lactate was toxic after 3, 4-5, 4-6, 7, or 7-8 days, resp. Subsequent studies with a broth medium revealed that lactate, not Na+, was the principal factor in delaying toxin formation.

L36 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:109382 HCAPLUS

DOCUMENT NUMBER: 108:109382

TITLE: The combined effect of sub-optimal

temperature and sub-optimal pH on growth

and toxin formation from spores of

Clastical to the control of the cont

Clostridium botulinum

AUTHOR(S): Graham, Ann F.; Lund, Barbara M.

CORPORATE SOURCE: Inst. Food Res., Norwich Lab., Norwich, NR4 7UA,

UK

SOURCE: Journal of Applied Bacteriology (1987), 63(5),

387-93

CODEN: JABAA4; ISSN: 0021-8847

DOCUMENT TYPE: Journal LANGUAGE: English

AB Low-acid foods (pH  $\geq 4.5$ ) are not sufficiently acidic to prevent growth of C. botulinum in otherwise optimal conditions. The combination of sub-optimal pH and sub-optimal temperature may,

however, result in a very significant reduction in the risk of growth of this bacterium compared with the risk in optimal conditions. The combined effect of incubation temps. of 12° and 16° and pH values of 5.2-5.5 on growth and toxin production from spores of C. botulinum during incubation for 28 days was investigated. Growth and formation of toxin (type B) were detected only in medium at pH 5.5 and incubated at 16°, corresponding to a probability of growth from a single spore of 1.6 + 10-5 within 14 days. The probability of growth in 28 days was <9 + 10-6. After transfer of inoculated media from 12° to 30°, growth occurred within 19 days at pH 5.2-5.5. After transfer of inoculated media from 12° to 20°, growth occurred at pH 5.5 and 5.4 but not at pH 5.3 or 5.2 in 40 days. Growth at pH 5.2-5.5 was accompanied by formation of toxin, in most cases of types A or B. In addition to the effect of sub-optimal temperature and pH, chelation of divalent metals ions by citrate may have contributed to inhibition.

L36 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

1986:456043 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 105:56043

TITLE: TLC immunostaining characterization of Clostridium

botulinum type A

neurotoxin binding to gangliosides and

free fatty acids

AUTHOR(S): Takamizawa, Kotaro; Iwamori, Masao; Kozaki,

Shunji; Sakaquchi, Genji; Tanaka, Ryuichiro;

Takayama, Hiroo; Nagai, Yoshitaka

Fac. Med., Univ. Tokyo, Tokyo, 113, Japan CORPORATE SOURCE:

FEBS Letters (1986), 201(2), 229-32 SOURCE:

CODEN: FEBLAL; ISSN: 0014-5793

DOCUMENT TYPE: Journal LANGUAGE: English

AB The receptor structure of C. botulinum neurotoxin

type A was analyzed by TLC immunostaining. Ganglioside GQlb [68652-37-9] was the most potent receptor, and the neurotoxin also bound to ganglioside GT1b [59247-13-1] and ganglioside GD1a [12707-58-3], but not to ganglioside GM3 [54827-14-4], ganglioside [19600-01-2], ganglioside GM1 [37758-47-7], ganglioside GD3 [62010-37-1], ganglioside GD1b [19553-76-5], and ganglioside GT1a [64522-98-1]. Optimum binding of neurotoxin to the ganglioside appeared in 0.01M phosphate buffer (pH 7.2) containing 0.2% NaCl. Higher and lower NaCl concns. diminished neurotoxin binding to the ganglioside. In addition, the neurotoxin was able to bind to free fatty acids. Maximum binding was observed on stearic acid and neurotoxin binding to free fatty acids was not affected by NaCl concentration

L36 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

1986:128561 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 104:128561

Use of preservatives to delay toxin TITLE:

formation by Clostridium botulinum (type B, strain okra) in vacuum-packed, cooked

potatoes

AUTHOR(S): Notermans, S.; Dufrenne, J.; Keybets, M. J. H. CORPORATE SOURCE:

Lab. Water Food Microbiol., Natl. Inst. Public Health Environ. Hyg., Bilthoven, 3720 BA, Neth.

SOURCE: Journal of Food Protection (1985), 48(10), 851-5

> Shears Searcher : 571-272-2528

CODEN: JFPRDR; ISSN: 0362-028X

DOCUMENT TYPE: Journal LANGUAGE: English

AB Storage at temps. below 4° prevents growth and toxin production by Closridium botulinum in vacuum-packed, cooked potatoes. The use of preservatives as an addnl., built-in safety factor has been investigated. Dipping potatoes in a solution of ascorbic [50-81-7] and citric acid [77-92-9] before vacuum-packing and cooking (95° for 50 min) inhibited growth and toxin production by proteolytic C. botulinum type B at an incubation temperature of 15° for 70 days and at 20° for ≥ 14 days. This preservative treatment also resulted in an organoleptically acceptable product with a prolonged shelf life. Risk anal. showed that the presence of C. botulinum in vacuum-packed, cooked potatoes may be expected, i.e., one spore in each 1585 kg of product. A preservative treatment with a combination of ascorbic and citric acid will limit the public health risk even if the potato product is accidentally

L36 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:128478 HCAPLUS

DOCUMENT NUMBER: 104:128478

TITLE: Plant trials of bacon made with lactic acid

stored for a short time at a temperature higher than 4°.

bacteria, sucrose and lowered sodium nitrite

AUTHOR(S): Tanaka, Nobumasa; Meske, Louise; Doyle, Michael

P.; Traisman, Edwin; Thayer, Donald W.; Johnston,

Ralph W.

CORPORATE SOURCE: Food Res. Inst., Univ. Wisconsin, Madison, WI,

53706, USA

SOURCE: Journal of Food Protection (1985), 48(8), 679-86

CODEN: JFPRDR; ISSN: 0362-028X

DOCUMENT TYPE: Journal LANGUAGE: English

Bacon prepared with 40 and 80 mg/kg (ppm) NaNO2, 0.7% sucrose [57-50-1], and a culture of Pediococcus acidilactici (Wisconsin Process), and control bacon prepared with 120 ppm NaNO2 and no added sucrose or bacterial culture were produced at 3 com. bacon production plants. NaCl, phosphate, and Na ascorbate (or Na erythorbate) levels, as well as other processing conditions, such as pumping rate, smokehouse temperature and time, forming and slicing conditions, were those normally used by each plant. Randomly selected samples of each lot were used for a challenge experiment with Clostridium botulinum (types A and B), with .apprx.1000 heat-shocked spores/g bacon inoculated on each slice, vacuum packaged, and incubated at 27°. Samples were taken periodically up to 56 days of incubation and examined for the presence of botulinal toxin. Test bacon was substantially greater in antibotulinal properties than the control bacon. Residual NaNO2 levels of test bacon were lower than those of the control bacon, as were nitrosamines formed upon frying. Average N-nitrosopyrrolidine [930-55-2] level was 8.6  $\mu$ g/kg (ppb) in the control, <2.7 ppb in the 80-ppm NO2- product, and <1.6 ppb in the 40-ppm NO2- product. Thus, bacon com. prepared by the Wisconsin Process with 40 or 80 ppm NaNO2 has a lesser risk of nitrosamine and botulinal toxin formation than bacon prepared with 120 ppm NaNO2 and no added sucrose and lactic acid bacteria.

L36 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:547322 HCAPLUS

DOCUMENT NUMBER: 101:147322

TITLE: Simple and rapid method for extraction of proteins

from bacteria

INVENTOR(S): Bhaduri, Saumya; Demchick, Paul H.

PATENT ASSIGNEE(S): United States Dept. of Agriculture, USA

SOURCE: U.S., 3 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4464295	Α	19840807	US 1983-524179	19830817
PRIORITY APPLN. INFO.:			US 1983-524179	19830817

Bacteria: Staphylococcus aureus, Escherichia coli, and Bacillus cereus AB were grown for 24 h in brain-heart infusion medium at 37°. Clostridium botulinum Was grown anaerobically in the same medium containing 1% arginine to delay autolysis. Cells from the cultures were harvested by centrifugation (7000 + g) washed twice with phosphate buffered saline, recentrifuged, resuspended in ice-cold acetone, allowed to stand for 5 min on ice, and collected by centrifugation. Residual acetone was removed and the protein were extracted by incubation with 1% SDS for 2 min. SDS-polyacrylamide gel electrophoresis indicated that the proteins obtained by the method was similar to that obtained by sonication or agitation with glass beads. The yield from S. aureus by acetone-SDS extraction was 200 mg protein/g dry weight of cells compared to 175 mg/g by the bead agitation technique. Yields for B. cereus, E. coli, and C. botulinum were 200, 225, and 150 mg proteins/g dry cell, resp. This method is inexpensive, rapid, simple and reproducible.

L36 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1981:42392 HCAPLUS

DOCUMENT NUMBER: 94:42392

TITLE: Isolation and properties of highly purified type

F Clostridium botulinum

toxin

AUTHOR(S): Uvarova, R. N.; Reshetnikova, L. N.;

Ispolatovskaya, M. V.; Bulatova, T. I. Inst. Epidemiol. Mikrobiol., Moscow, USSR

SOURCE: Zhurnal Mikrobiologii, Epidemiologii i

Immunobiologii (1980), (11), 42-6

CODEN: ZMEIAV; ISSN: 0372-9311

DOCUMENT TYPE: Journal LANGUAGE: Russian

CORPORATE SOURCE:

AB The steps involved in the isolation of C. **botulinum** toxin were initial precipitation with (NH4)2SO4 or Na

hexametaphosphate after cultivation of the culture for 4 days at 28°, ultrafiltration through amicon membrane, gel filtration on

2 sephadex G-100 columns and elution with pH 5.6 Na phosphate

-phosphate buffer, chromatog. on DEAE-cellulose, dialysis in a pH 4.2 acetate buffer containing 0.1 M

NaCl, chromatog. on SP-sephadex (C-50), repeating of dialysis,

ultrafiltration and then gel filtration on sephadex G-200, and finally

dialysis and chromatog. on DEAE-cellulose. The activity of the purified toxin ranged 1.5-4 + 107 (min. LD)/mg protein and had a mol. weight of 50,000 daltons.

L36 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

1979:518322 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 91:118322

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Structure and toxicity of Clostridium TITLE:

botulinum type C Toxin

Syuto, Bunei; Kubo, Shuichiro AUTHOR(S):

Fac. Vet. Med., Hokkaido Univ., Sapporo, 060, CORPORATE SOURCE:

Japan

Japanese Journal of Medical Science & Biology SOURCE:

(1979), 32(2), 132-3

CODEN: JJMCAQ; ISSN: 0021-5112

DOCUMENT TYPE: Journal LANGUAGE: English

C. botulinum Toxin C could be separated into 2 peptide AB

chains by chromatog. of QAE-Sephadex A-50 with a linear gradient of

NaCl in 6% 2-mercaptoethanol-borate phosphate

buffer at pH 8.1 and 0°. The components had different

antigenicities and antitoxin to either chain neutralized the mother toxin toxicity. Combining the 2 chains gave an active form having 74% of the toxicity of the mother toxin; thus both chains are essential for toxicity. The reconstitution method affected the toxicity of the material prepared from the chains. Tryptophan and tyrosine residues were critical to maintain the toxin toxicity.

L36 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

1977:169232 HCAPLUS ACCESSION NUMBER:

86:169232 DOCUMENT NUMBER:

TITLE: Effect of additional concentration and

purification on the antigenic activity and

chemical composition of toxoids for use in aerosol

vaccines

Shipulina, N. I.; Vasil'eva, I. P.; Didenko, L. AUTHOR(S):

A.; Shapareva, S. I.; Karpov, S. P.

Tomsk. Nauchno-Issled. Inst. Vaktsin Syvorotok, CORPORATE SOURCE:

Tomsk, USSR

Trudy - Tomskii Nauchno-Issledovatel'skii Institut SOURCE:

Vaktsin i Syvorotok, Tomskii Meditsinskii Institut

[i] Tomskoe Otdelenie Vserossiiskogo

Nauchno-Meditsinskogo Obshchestva Mikrobiologov, Epidemiologov i Parazitologov (1975), 25, 159-63

CODEN: TTVMA9; ISSN: 0130-4917

DOCUMENT TYPE: Journal LANGUAGE: Russian

The toxoids of Clostridium botulinum type A,

B, and E were purified by precipitation at pH 3.3-3.5 and dialysis

against phosphate buffer pH 6.81. C. tetani

toxoids were precipitated with 15% NaCl and dialyzed against water. The content of Ca, Na, K, SO42-, B, P, and Cl decreased below those of starting crude toxoids. The antigenic activity and stability during

storage also decreased after the purification

L36 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

1976:400877 HCAPLUS ACCESSION NUMBER:

85:877 DOCUMENT NUMBER:

Extraction and concentration of Clostridium TITLE:

botulinum toxins from specimens

AUTHOR(S): Sonnenschein, B.; Bisping, W.

Inst. Mikrobiol. Tierseuchen, Tieraerztl. Hochsch. CORPORATE SOURCE:

Hannover, Hannover, Eed. Rep. Ger.

Zentralblatt fuer Bakteriologie, Parasitenkunde, SOURCE:

Infektionskrankheiten und Hygiene, Abteilung 1: Originale, Reihe A: Medizinische Mikrobiologie

und Parasitologie (1976), 234(2), 247-59

CODEN: ZMMPAO; ISSN: 0300-9688

DOCUMENT TYPE: Journal

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LANGUAGE: German C. botulinum toxins A-E were

> added to canned green beans diluted 1:2 with 0.1M phosphate buffer, pH 6. The preparation was homogenized and centrifuged at 4000 rpm for 30 min. Fifteen ml of the supernatant was concentrated by Millipose ultrafiltration (membrane retaining material with mol. weight >25,000) to a volume of 0.5 ml. The 5 toxins were concentrated 14 .8-112.2-fold.

L36 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

1974:105759 HCAPLUS ACCESSION NUMBER:

80:105759 DOCUMENT NUMBER:

Germination of spores of Clostridium species TITLE:

> capable of causing food poisoning. II. Effects of some chemicals on the germination of spores of

C. botulinum type A

Ando, Yoshiaki AUTHOR(S):

CORPORATE SOURCE: Hokkaido Inst. Public Health, Sapporo, Japan

Shokuhin Eiseigaku Zasshi (1973), 14(5), 462-6 SOURCE:

CODEN: SKEZAP; ISSN: 0015-6426

DOCUMENT TYPE: Journal LANGUAGE: Japanese

Spores of C. botulinum type A 190 were heated at

70° for 10 min in 250mM phosphate buffer pH

6.7, cooled, and then incubated at 37° in germination medium

containing 5mM L-alanine, 10mM Na L-lactate, 60mM NaHCO3, and 100mM phosphate buffer pH 6.7. Addition of 150mM D-alanine

prevented germination. Addition of ≥5% NaCl or

≥1% Na sorbate to the medium retarded germination. EDTA,

dipicolinic acid, and 2-(2-furyl)-3-(5-nitro-2-furyl)acrylamide showed

no effect.

L36 ANSWER 22 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

1969:85842 HCAPLUS ACCESSION NUMBER:

70:85842 DOCUMENT NUMBER:

TITLE: Purification and molecular dissociation of the

precursor of Clostridium botulinum type

E toxin

AUTHOR(S): Kitamura, Masaru; Sakaguchi, Simiko; Sakaguchi,

Genji

Nat. Inst. Health, Tokyo, Japan CORPORATE SOURCE:

Anaerobic Bact., Proc. Int. Workshop, 5th (1968), SOURCE: Meeting Date 1967, 213-22. Editor(s): Fredette,

V. Inst. Microbiol. Hyg. Montreal Univ.:

Laval-des-Rapides, Can.

CODEN: 20QCAI

DOCUMENT TYPE: Conference

LANGUAGE: English The toxin of C. botulinum type E is

formed as a nontoxic ribonucleoprotein (I) which can be extracted from the cells with 0.2M phosphate buffer, pH 6.0. The protein moiety is purified by precipitation of I by half-saturated (NH4)2SO4,

chromatog. on CM-Sephadex C-50 (II) at pH 6.0 (0.02M acetate buffer), digestion with RNase, rechromatog. on II at pH 6.0 with a linear concentration gradient of Nacl in 0.02M acetate buffer, precipitation by half-saturated (NH4)2SO4, chromatog. on Sephadex G-200, and rechromatog. on II. The toxicity of the product for mice was 2-8 LD50/mg. N, but activation by trypsin raised this to 5-10 LD50/mg. N. The material appeared homogeneous on disk electrophoresis (pH 4) and on ultracentrifugation (pH 4.5 or 6.0, s20, W 11.3-12.3 S), but gave 2 distinct precipitin lines on immunodiffusion and 2 distinct zones on electrophoresis (cellulose acetate) at pH 7. Ultracentrifugation at pH 8 (0.05M Veronal buffer) gave a single major band, s20, W 7.3 S. Starch-gel electrophoresis at pH 8 (0.05M Veronal buffer) gave partial separation into anodic and cathodic peaks; only the latter gave active toxin after treatment with trypsin.

L36 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1968:46431 HCAPLUS

DOCUMENT NUMBER: 68:46431

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TITLE: Chromatographic isolation of hemagglutinin-free

neurotoxin from crystalline toxin
of Clostridium botulinum type A

AUTHOR(S): DasGupta, Bibhuti R.; Boroff, Daniel A.

CORPORATE SOURCE: Albert Einstein Med. Center, Philadelphia, PA, USA

SOURCE: Biochimica et Biophysica Acta, Protein Structure

(1967), 147(3), 603-5

CODEN: BBPTBH; ISSN: 0005-2795

DOCUMENT TYPE: Journal LANGUAGE: English

Crystalline toxin in 0.025 M phosphate (I) buffer was applied to a DEAE-cellulose column equilibrated with the buffer, and eluted with a linear gradient of I. Three distinct peaks plus a trace 4th peak were eluted. The 1st (14 .6% of the total eluted protein) was highly toxic, and showed no hemagglutinating activity. The next 2 strongly agglutinated red blood The 1st peak was the  $\alpha$  fraction previously obtained with cells. Tris-HCl buffer chromatog. (loc. cit.). It was possible to sep. the  $\alpha$  fraction by a 2nd, simpler procedure employing I buffer, without application of a gradient elution. The purification on DEAE-cellulose appeared to be as good with I as with Tris-HCl buffer. Isolation of the hemagglutinin-free neurotoxin by elution with 0.05M gave higher yields of this fraction than did elution with 0.025M I or Tris-HCl buffer. Substitution of Cl- with I did not appear to alter the resolution pattern of crystalline toxin or the neurotoxin. The fraction showed chromatog. homogeneity in both I and Tris-HCl buffer.

L36 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1968:20941 HCAPLUS

DOCUMENT NUMBER: 68:20941

TITLE: Demonstration of bacterial toxins in foodstuffs by

means of immunofluorescence

AUTHOR(S): Riemann, Hans

CORPORATE SOURCE: Sch. of Vet. Med., Univ. of California, Davis, CA,

USA

SOURCE: Nordisk Veterinaermedicin (1967), 19(4), 188-94

CODEN: NOVTAV; ISSN: 0029-1579

DOCUMENT TYPE: Journal LANGUAGE: Danish

Staphylococcal enterotoxin B antitoxin, obtained from rabbits, was conjugated with fluorescein isothiocyanate and purified on DEAE-cellulose and Sephadex columns. The conjugate was adsorbed to nontoxin-producing staphylococcal strains and purified as Sephadex. To avoid false neg. results due to extracellular localization of toxin, the conjugate and culture, after incubation at 30° for 30 min. and at 20° for 4 hrs., were filtered through a 0.22-μ pore filter plus Whatman Number 1 filter paper. preparates were prepared by growing cultures on dialysis membranes mounted on blood-agar. The preparate was freeze-dried and colored by incubation with conjugate at 37°. With these methods 1  $\gamma$ toxin/ml. sample was detected. In a quant. modification, antiserum and agar were mixed (50:50) and poured into small glass tubes. Test solution was pipetted on the gel and after 1-7 days incubation, the amount of toxin was estimated, being related to the distance between the surface and the line of precipitation With this method 4  $\gamma$ /ml. were detectable after 8 days and 8  $\gamma$ /ml. after 1 day. The toxin was identified by gel-diffusion technique. These methods were used for determination of toxin in various foods. It was found that 1-10  $\gamma$  toxin was formed per g. ham on anaerobic storage for 8-13 days at room temperature The amount of toxin formed varied according to pH and salt concentration At pH 6.9 and NaCl concentration 10-12 g./100 ml. and pH 5.1 and NaCl concentration 4 g./100 ml. both totally inhibited production of toxin. Com. Clostridium botulinum E antiserum was purified by precipitation with (NH4)2SO4 and chromate on Sephadex and in two steps adsorbed to nontoxin-producing and toxin-producing C. botulinum E. Com. rabbit antihorse serum γ-qlobulin, conjugated with fluorescein isothiocyanate was dialyzed against a phosphate buffer and chromatographed on a DEAE-cellulose column. Preparates were incubated with antitoxin for 0.5-1 hr. at 37° and again under the same conditions with rabbit antihorse serum. Neither nontoxic strain E nor strain A or B or pseudobotulinum E from toxic cultures of strain E showed fluorescence with reagent. cultures of strain E showed no fluorescence when tested against antitoxin A or B. Incubations of ham showed, when tested on mice, that toxin was produced when the salt concentration decreased under 2.5 q./100 ml. H2O; these expts., however, were neg. to the fluorescence being described.

L36 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1962:45110 HCAPLUS

DOCUMENT NUMBER: 56:45110
ORIGINAL REFERENCE NO.: 56:8479f-h

TITLE: Decontamination of drinking water with mobile

equipment

AUTHOR(S): Mehls, Karl F. H.

SOURCE: GWF, das Gas- und Wasserfach (1961), 102, 1365-9

CODEN: GAWFAN; ISSN: 0367-3839

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB This is an abridgment of an article to be published as a Dechema monograph. A discussion is presented of the field use of mobile equipment to remove radioactivity, bacteria, viruses, botulins, and war gases from drinking water. In general, better results are secured

by adding filter material, reagents, etc., to the water than by using fixed filter beds. Kieselguhr can be treated with Ag to have a bactericidal effect. Cl kills bacteria and viruses and destroys biol. warfare materials such as the **botulinus toxins** in a few min. This is most conveniently supplied as NaClO from the electrolysis of NaCl solns., although Ca(ClO)2 can also be used. Where war gases such as **phosphate** esters, are present, these can be removed by hydrolysis at a high pH in the presence of hypochlorite. Adsorption followed by precipitation and the use

of

flocculants is also suggested. Radioactivity can readily be removed by mixed-bed deionization filters, but the mixed-bed resin deteriorates with time, especially when stored at elevated temps. Handling of the contaminated resin and regeneration is also a problem. M. uses a cation exchanger operating on a Na cycle. Patent coverage on decontamination processes is cited.

L36 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1956:90076 HCAPLUS

DOCUMENT NUMBER: 50:90076
ORIGINAL REFERENCE NO.: 50:16971f-h

TITLE: Isolation of an aminopeptidase from type B

Clostridium botulinum Millonig, Robert C.

CORPORATE SOURCE: Johns Hopkins Univ., Baltimore, MD

SOURCE: Journal of Bacteriology (1956), 72, 301-7

CODEN: JOBAAY; ISSN: 0021-9193

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB A method is described for the purification of a proteinase in the culture supernatant of type B C. botulinum (Okra

strain) by fractional precipitation with (NH4)2SO4 and subsequent repptn.

with

AUTHOR(S):

Nacl under controlled conditions of pH, (NH4)2SO4 concentration, and temperature The method is rapid and permits purification of approx. 300-fold with a 15% loss in the amount of enzyme recovered. Solubility measurements and ultracentrifuge analysis on the purified prepns. indicate the presence of one component. The proteinase was found to contain little or no tyrosine and tryptophan by study of its absorption in the ultraviolet spectrum. The purified product appears to contain but one proteinase which is optimally activated by Fe++-cysteine; and was shown to be an aminopolypeptidase capable of splitting tripeptides but not dipeptides. The ferrous ion is necessary for activity of the enzyme. Binding the ferrous ion with Versene renders the proteinase inactive.

L36 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1947:6248 HCAPLUS

DOCUMENT NUMBER: 41:6248
ORIGINAL REFERENCE NO.: 41:1275c-e

TITLE: Molecular weight and homogeneity of crystalline

botulinus A toxin

AUTHOR(S): Putnam, Frank W.; Lamanna, Carl; Sharp, D. G.

CORPORATE SOURCE: Camp Detrick, Frederick, MD

SOURCE: Journal of Biological Chemistry (1946), 165, 735-6

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB cf. C.A. 40, 4767.2, 6121.2. The electrophoretic, sedimentation, and

diffusion characteristics of crystalline Clostridium botulinum type A toxin have been studied in 0.1 N Na acetate buffer, pH 4.38. The toxin is electrophoretically homogeneous and has a mobility of 2.75 + 10-5 sq. cm. volt-1 sec.-1. The ultracentrifugal sedimentation diagrams show a single symmetrical boundary and yield a value of S20 = 17.3 Svedberg units. The diffusion constant of a 0.63% solution at 25° by the refractometric scale method is 2.14 + 10-7 sq. cm. sec.-1. Satisfactory agreement at successive time intervals among the values calculated by different methods and a good fit of the normalized diffusion curves with the ideal distribution curve have been realized. The boundary spread in the ultracentrifuge is greater than that attributable to diffusion alone. If a partial sp. volume of 0.75 is assumed, the mol. weight calculated from S20 and D20 900,000 (cf. C.A. 40, 6560.1); this suggests the presence of 2.1

900,000 (cf. C.A. 40, 6560.1); this suggests the presence of 2.1  $\pm$  107 mols. per mouse LD50. A tentative frictional value of 1.76 is assigned. If the mols. are assumed to be prolate elipsoids, this figure corresponds to an axial ratio, b/a = 14.6, neglecting hydration.

L36 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1924:26723 HCAPLUS

DOCUMENT NUMBER: 18:26723
ORIGINAL REFERENCE NO.: 18:3621g-i

is

TITLE: Optimum and limiting hydrogen-ion concentrations

for B. botulinus and

quantitative estimation of its growth. XVI

AUTHOR(S): Dozier, Carrie C.

SOURCE: Journal of Infectious Diseases (1924), 35, 105-33

CODEN: JIDIAQ; ISSN: 0022-1899

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB The optimum range of H-ion concentration for B. botulinus in phosphate-buffered double-strength veal infusion + 2% Difco peptone is pH 6.0 to 8.2, inclusive, with a mean near pH 7.0, when vegetative forms are planted. The limiting range for 3-day growths is from pH 5 to 9, inclusive. The indications are that a slight acidity may be a stimulus to spore germination. Approx. the same optimum zone, pH 6.0 to 8.9. was demonstrated for B. botulinus, B. sporogenes and B.

histolyticus vegetative inoculums in autolyzed veal infusion.

B. botulinus grows well at 37°, but the
number of viable organisms decreased rapidly at such a temperature
The peak of proliferation is reached somewhat more slowly at
26.5°, and the decline in nos. is retarded. The decline in
nos. is followed by autolysis, which is probably the mechanism of
toxin formation. Vegetable mediums support fair growth of B
. botulinus. The most active limiting factor in such

. botulinus. The most active limiting factor in such mediums seems to be the natural acidity.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN, TOXCENTER, PASCAL, FEDRIP, DISSABS' ENTERED AT 12:02:38 ON 27 OCT 2005)

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L1 1 SEA FILE=REGISTRY ABB=ON PLU=ON BOTOX/CN
L2 6 SEA FILE=REGISTRY ABB=ON PLU=ON BOTULIN TOXIN? /CN
L3 8 SEA FILE=REGISTRY ABB=ON PLU=ON BOTULIN NEUROTOXIN? /CN
L4 8 SEA FILE=REGISTRY ABB=ON PLU=ON BOTULINUM TOXIN? /CN
L5 14 SEA FILE=REGISTRY ABB=ON PLU=ON BOTULINUM NEUROTOXIN?
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		/CN
L6	134	SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULIN A ? OR BOTULIN
		B ? OR BOTULIN C1 ? OR BOTULIN C2 ? OR BOTULIN D ? OR
		BOTULIN E ? OR BOTULIN F ?)/CN
L7	2	SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULINUM A ? OR
		BOTULINUM B ? OR BOTULINUM C1 ? OR BOTULINUM C2 ? OR
то	156	BOTULINUM D ? OR BOTULINUM E ? OR BOTULINUM F ?)/CN SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3 OR L4 OR
T8	136	L5 OR L6 OR L7
L9	9	SEA FILE=REGISTRY ABB=ON PLU=ON (PHOSPHATE/CN OR
	_	"PHOSPHATE (32PO4)"/CN OR "PHOSPHATE (H2PO4-)"/CN OR
		"PHOSPHATE (H2PO41-)"/CN OR "PHOSPHATE (HPO42-)"/CN OR
		"PHOSPHATE (P2074-)"/CN OR "PHOSPHATE (P40123-)"/CN) OR
		"PHOSPHATE (P60186-)"/CN OR ("PHOSPHATE (P03-)"/CN OR
		"PHOSPHATE (PO31-)"/CN OR "PHOSPHATE (PO32-)"/CN) OR
L10	1	"PHOSPHATE (PO43-)"/CN OR "PHOSPHATE (PO4H2-)"/CN SEA FILE=REGISTRY ABB=ON PLU=ON CITRATE/CN
L10 L11		SEA FILE=REGISTRY ABB=ON PLU=ON ACETATE/CN
L12		SEA FILE=REGISTRY ABB=ON PLU=ON SUCCINATE/CN
L13	12	SEA FILE=REGISTRY ABB=ON PLU=ON L9 OR L10 OR L11 OR L12
L15		SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULIN G ? OR BOTULINUM
		G ?)/CN
L16		SEA FILE=REGISTRY ABB=ON PLU=ON L8 OR L15
L18	1354347	SEA FILE=HCAPLUS ABB=ON PLU=ON L13 OR PHOSPHATE OR
		CITRATE OR ACETATE OR SUCCINATE OR SUCCINIC OR BUTANEDIOIC OR ACETIC
L27	6302	SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR (BO OR BOTULIN?) (5A
ישנו	0302	) (NT OR TOXIN OR NEUROTOXIN OR TOX#) OR BOTOX# OR BONT# OR
		BOTY# OD BTY# OD /BT OD BN OD BNT#\/S\BOTHITIN2 OD BOTHITIN2/
		3A) (A OR B OR C1 OR C2 OR D OR E OR F OR G)
L28	290	3A) (A OR B OR C1 OR C2 OR D OR E OR F OR G) SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND L18 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND (14) OR NACL OR
L29	66	SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND (14)OR NACL OR
T 2.4	22	(NA OR SODIUM) (W) (CL OR CHLORIDE) OR SALINE)
L34 L37	•	SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND BUFFER? SEA L34
L39		SEA L37 AND (PH OR (H OR HYDROGEN) (W) ION)
_	_	
L1		SEA FILE=REGISTRY ABB=ON PLU=ON BOTOX/CN
L2 L3		SEA FILE=REGISTRY ABB=ON PLU=ON BOTULIN TOXIN? /CN SEA FILE=REGISTRY ABB=ON PLU=ON BOTULIN NEUROTOXIN? /CN
L3		SEA FILE=REGISTRY ABB=ON PLU=ON BOTULINUM TOXIN? /CN
L5		SEA FILE=REGISTRY ABB=ON PLU=ON BOTULINUM NEUROTOXIN?
		/CN
L6	134	SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULIN A ? OR BOTULIN
		B ? OR BOTULIN C1 ? OR BOTULIN C2 ? OR BOTULIN D ? OR
		BOTULIN E ? OR BOTULIN F ?)/CN
L7	2	SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULINUM A ? OR
		BOTULINUM B ? OR BOTULINUM C1 ? OR BOTULINUM C2 ? OR BOTULINUM D ? OR BOTULINUM E ? OR BOTULINUM F ?)/CN
L8	156	SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3 OR L4 OR
10	150	L5 OR L6 OR L7
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1 SEA FILE=REGISTRY ABB=ON PLU=ON CITRATE/CN
L10
L11
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              1 SEA FILE=REGISTRY ABB=ON PLU=ON SUCCINATE/CN
L12
             12 SEA FILE=REGISTRY ABB=ON PLU=ON L9 OR L10 OR L11 OR L12
L13
              6 SEA FILE=REGISTRY ABB=ON PLU=ON (BOTULIN G ? OR BOTULINUM
L15
                 G ?)/CN
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L16
        1354347 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 OR PHOSPHATE OR
L18
                CITRATE OR ACETATE OR SUCCINATE OR SUCCINIC OR BUTANEDIOIC
                OR ACETIC
L27
           6302 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR (BO OR BOTULIN?) (5A
                ) (NT OR TOXIN OR NEUROTOXIN OR TOX#) OR BOTOX# OR BONT# OR
                BOTX# OR BTX# OR (BT OR BN OR BNT#)(S)BOTULIN? OR BOTULIN?(
                3A) (A OR B OR C1 OR C2 OR D OR E OR F OR G)
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L28
L29
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             16 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND (TEMP OR TEMPERATU
L35
                RE)
L38
             46 SEA L35
             9 SEA L38 AND (STORE# OR STORING OR STORAGE)
L43
             39 S (L39 OR L43) NOT L32
L44
             20 DUP REM L44 (19 DUPLICATES REMOVED)
L45
L45 ANSWER 1 OF 20
                        MEDLINE on STN
                                                        DUPLICATE 1
ACCESSION NUMBER:
                    2005010262
                                   MEDLINE
                    PubMed ID: 15635936
DOCUMENT NUMBER:
                    Factors affecting autocatalysis of botulinum
TITLE:
                    A neurotoxin light chain.
                    Ahmed S Ashraf; Ludivico Matthew L; Smith Leonard A
AUTHOR:
CORPORATE SOURCE:
                    Department of Immunology and Molecular Biology,
                    Division of Toxinology and Aerobiology, United States
                    Army Medical Research Institute of Infectious Diseases,
                    Fort Detrick, MD 21702, USA.. syed.ahmed@amedd.army.mil
SOURCE:
                    Protein J, (2004 Oct) 23 (7) 445-51.
                    Journal code: 101212092. ISSN: 1572-3887.
PUB. COUNTRY:
                    Netherlands
DOCUMENT TYPE:
                    Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:
                    English
                    Priority Journals
FILE SEGMENT:
                    200504
ENTRY MONTH:
ENTRY DATE:
                    Entered STN: 20050108
                    Last Updated on STN: 20050415
                    Entered Medline: 20050414
     The light chain of botulinum neurotoxin serotype
AB
     A undergoes autocatalytic fragmentation into two major
     peptides during purification and storage (Ahmed S. A. et al. 2001, J.
     Protein Chemical 20:221-231) by both intermolecular and intramolecular
     mechanisms (Ahmed S. A. et al. 2003, Biochemistry 42:12539 12549).
     In this study, we investigated the effects of buffers and
     salts on this autocatalytic reaction in the presence and absence of
     zinc chloride. In the presence of zinc chloride, the fragmentation
     reaction was enhanced in each of acetate, MES, HEPES and
     phosphate buffers with maximum occurring in
     acetate when compared to those in the absence of zinc
     chloride. Adding sodium chloride in
     phosphate buffer in the presence of zinc chloride
```

increased the extent of proteolysis. Irrespective of the presence of zinc chloride, adding sodium chloride or potassium chloride in phosphate buffer elicited an additional proteolytic reaction. Higher concentrations of sodium phosphate buffer enhanced the autocatalytic reaction in the absence of zinc chloride. In contrast, in the presence of zinc chloride, higher concentrations of sodium phosphate decreased the autocatalytic reaction. Optimum pH of autocatalysis was not affected significantly by the absence or presence of zinc chloride. Like zinc chloride, other chlorides of divalent metals, such as magnesium, cobalt, iron and calcium also enhanced the autocatalytic reaction. Polyols such as ethylene glycol protected the light chain from fragmentation. Exposure of light chain to UV radiation led to enhanced fragmentation. In order to avoid fragmentation, the protein should be stored frozen in a low concentration buffer of neutral or higher pH devoid of any metal. Our results provide a choice of buffers and salts for isolation, purification and storage of intact botulinum neurotoxin serotype A light

L45 ANSWER 2 OF 20 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 2003544311 MEDLINE DOCUMENT NUMBER: PubMed ID: 14623391

TITLE: Combined effects of ionizing-irradiation and different

environments on Clostridium botulinum type

E spores.

AUTHOR: Lim Y H; Hamdy M K; Toledo R T

CORPORATE SOURCE: Department of Food Science and Technology, University

of Georgia, Athens, GA 30602, USA.

SOURCE: International journal of food microbiology, (2003 Dec

31) 89 (2-3) 251-63.

Journal code: 8412849. ISSN: 0168-1605.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH:

ENTRY DATE: Entered STN: 20031119

200402

Last Updated on STN: 20040213 Entered Medline: 20040212

We examined the combined effects of gamma-radiation (24 degrees C) on spores of Clostridium botulinum-type Eklund strain suspended in different gas-saturated Na-phosphate buffer in absence or presence of protectors or sensitizers. Response surface methodology (RSM) was also used to ascertain the effects of radiation on the recovery of spores using a medium containing various levels of NaCl or Na-thioglycollate. The former (< 0.5%) decreased viable spore counts, but the latter (0.15%) did not. Irradiation inactivation of Eklund spores was most effective in air-saturated buffers compared to N2O and N2 gas. The Na2-EDTA (0.01 M) was the most efficient radioprotector of spores due to its reactivity toward hydroxy radicals, followed by t-butanol (0.1 M) in NO2 or N(2)-saturated **buffers**, respectively. Catalase (10.0 mg ml(-1)) and DL-cysteine (0.1 mM) sensitized the spores during irradiated N2O or N(2)-saturated buffers, and NaCl (0.01 M) only sensitized spores in N2 environment. Spores frozen at -75 degrees C for 30 days and thawed prior to use were more sensitive to radiation damage compared to freshly prepared spores. Glycerol

(15%), in Na-phosphate buffer (pH 7.0, 0.06 M), protected Eklund spores and increased the number of spores from 10(6) to 10(11) colony forming unit (CFU) ml(-1), and enhanced their radiosensitivities. Seven strains of C. botulinum type E were screened for plasmids and strain BL764 had two plasmids (15.8 and 46.8 mDa), BL4028 also had two (4.4 and 13.2 mDa), BL4850 contained only one (4.9 mDa), whereas EQA, BL211, Eklund, and Beluga had none. Gamma-Radiation (10 kGy, absorbed dose) cured the 15.8-mDa plasmid in strain BL764, but its absence yielded no changes in toxigenicity.

L45 ANSWER 3 OF 20 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2001-049992 [06] WPIDS

DOC. NO. CPI: C2001-013779

TITLE: Composition useful for e.g. treating nervous system

disorders, comprising botulinum

neurotoxin, is free from natural complexing

proteins and is not antigenic.

DERWENT CLASS: B04 D16

INVENTOR(S):
BIGALKE, H; FREVERT, J

PATENT ASSIGNEE(S): (BIOT-N) BIOTECON-GES BIOTECHNOLOGISCHE; (MERZ-N)

MERZ PHARMA GMBH & CO KGAA; (MRZC) MERZ & CO GMBH & CO; (MRZC) MERZ PHARMA GMBH & CO KGAA; (MRZC) MERZ

PHARMA GMBH & CO KG

COUNTRY COUNT: 94

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK LA	A PG
WO 2000074703	A2 20001214	(200106)* GE	14
		•	H GM GR IE IT KE LS LU MC MW
MZ NL OA	PT SD SE SI	SZ TZ UG ZW	
W: AE AG AL	AM AT AU AZ	BA BB BG BR BY	Y CA CH CN CR CU CZ DE DK DM
DZ EE ES	FI GB GD GE	GH GM HR HU ID	O IL IN IS JP KE KG KP KR KZ
LC LK LR	LS LT LU LV	MA MD MG MK MN	N MW MX MZ NO NZ PL PT RO RU
SD SE SG	SI SK SL TJ	TM TR TT TZ UA	A UG US UZ VN YU ZA ZW
DE 19925739	A1 20001221	(200106)	
AU 2000058047	A 20001228	(200119)	
DE 10081516	T 20010913	(200153)	
NO 2001005964	A 20020130	(200223)	
EP 1185291	A2 20020313	•	
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PT RO SE	<del></del>		
CZ 2001004351	A3 20020612		
KR 2002008214	A 20020129	\ <del> ,</del>	
CN 1354670		(200263)	
	A2 20020930	•	
		(200321)	27
ZA 2001010074		(200341)	36
EP 1185291	B1 20040204	• • • • • • • • • • • • • • • • • • • •	
		ES FI FR GB GR	R IE IT LI LT LU LV MC MK NL
PT RO SE		(200425)	
DE 50005208		(200425)	
ES 2215056	T3 20041001		
AU 774590 KR 466407	B2 20040701 B 20050127	(200469) (200535)	
	A1 20041101		
M 2001012340	WI SOUATION	(200330)	

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000074703	A2	WO 2000-DE1777	20000526
DE 19925739	A1	DE 1999-1025739	19990607
AU 2000058047	Α	AU 2000-58047	20000526
DE 10081516	T	DE 2000-10081516	
		WO 2000-DE1777	20000526
NO 2001005964	Α	WO 2000-DE1777	
		NO 2001-5964	
EP 1185291	A2	EP 2000-943666	20000526
		WO 2000-DE1777	20000526
CZ 2001004351	<b>A</b> 3	WO 2000-DE1777	20000526
		CZ 2001-4351	
KR 2002008214	Α	KR 2001-715668	
CN 1354670	Α	CN 2000-808641	
HU 2002001530	A2	WO 2000-DE1777	
		HU 2002-1530	20000526
JP 2003505343	W	WO 2000-DE1777	
		JP 2001-501237	
ZA 2001010074	Α	ZA 2001-10074	20011206
EP 1185291	B1	EP 2000-943666	
		WO 2000-DE1777	20000526
DE 50005208	G	DE 2000-00005208	20000526
		EP 2000-943666	20000526
		WO 2000-DE1777	20000526
	Т3	EP 2000-943666	
	B2	AU 2000-58047	
KR 466407	В	WO 2000-DE1777	20000526
		KR 2001-715668	
MX 2001012540	A1	WO 2000-DE1777	
		MX 2001-12540	20011205

# FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000058047	A Based on	WO 2000074703
DE 10081516	T Based on	WO 2000074703
EP 1185291	A2 Based on	WO 2000074703
CZ 2001004351	A3 Based on	WO 2000074703
HU 2002001530	A2 Based on	WO 2000074703
JP 2003505343	W Based on	WO 2000074703
EP 1185291	B1 Based on	WO 2000074703
DE 50005208	G Based on	EP 1185291
	Based on	WO 2000074703
ES 2215056	T3 Based on	EP 1185291
AU 774590	B2 Previous Publ.	AU 2000058047
	Based on	WO 2000074703
KR 466407	B Previous Publ.	KR 2002008214
	Based on	WO 2000074703
MX 2001012540	Al Based on	WO 2000074703

PRIORITY APPLN. INFO: DE 1999-19925739 19990607

AN 2001-049992 [06] WPIDS AB WO 200074703 A UPAB: 20041015

NOVELTY - Pharmaceutical composition containing one or more botulinum neurotoxins (A) from Clostridium

botulinum types A-G in which (A) is free

of proteins that are naturally combined with (A) in complexes, is new.

ACTIVITY - Antispasmodic; antimigraine. A patient, with torticollis spasmodicus had been treated with Botox (RTM for native neurotoxin-protein complexes) for 5 years and produced neutralizing antibodies, so no longer responded to treatment. He was treated with 145 units of uncomplexed (A), equivalent to the doses of Botox (RTM) previously given, and within 72 hr the muscles were relaxed, the head was held normally and muscular pain was alleviated. No adverse effects were observed.

MECHANISM OF ACTION - Motor end plate nerve ending binder. USE - The composition is used:

- (i) to treat nervous system disorders and dystonia (specifically torticollis spasmodicus, belpherospasm, spasticity, hemifacial spasm, migraine, lumbalgia, cervical syndrome and hypersalivation); and
- (ii) cosmetically to treat hyperhidrosis and facial wrinkles, most particularly in subjects who already produce neutralizing antibodies against the native complexes.

ADVANTAGE - (A) induces neutralizing antibodies to a lesser extent than the native complexes, or not at all, so can be used for long term treatment. Also it is available immediately and binds directly to nerve endings on the motor end plate. Rats were intracutaneously injected with native (A)-protein complexes or free (A), at 200 pg (A). Four of 8 animals treated with the complex developed neutralizing antibodies that inhibited activity of the toxin, but none of those treated with uncomplexed (A) did. Dwg.0/0

L45 ANSWER 4 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:123675 TOXCENTER COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA13504043124S

TITLE: Method of immunoenzymic detection of botulin

toxin and apparatus for the detection

AUTHOR(S): Trojan, Czeslaw; Kuczek, Marian

CORPORATE SOURCE: ASSIGNEE: Wyzsza Szkola Oficerska im. Tadeusza

Kosciuszki

PATENT INFORMATION: PL 179790 B1 31 Oct 2000

SOURCE: (2000) Pol., 4 pp.

CODEN: POXXA7.

COUNTRY: POLAND DOCUMENT TYPE: Patent FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 2001:491426

LANGUAGE: Polish

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20020319

As semiquant. field method for the immunoenzymic detection of botulin toxin on glass fiber paper Whatman GF/A is described. Anti-botulotoxin antibodies labeled with fluorescein isothiocyanate (FITC) are fixed on the dry paper in a vertical line. The crossing horizontal line made under UV lamp contains similarly FITC-labeled antibodies with botulin toxin or toxoid. After drying the paper is saturated with 1% casein. On the prepared paper, a drop of the aqueous extract of the sample is applied, followed by 0.5 mL stabilized anti-botulotoxin antibodies labeled with peroxidase (1 µg/mL in 0.1 M phosphate buffer pH 6.5). After soaking of the solns. into the paper and drying, the paper surface is washed with 1% aqueous NaCl with 0.01% cetylpyrimidine HCl detergent in 0.01% phosphate

buffer pH 6.5. Subsequently a drop of alc. solution of the chromogenic substrate (tetramethylbenzidine chloride or sulfate) and H2O2 are added. The developed color is visually judged pos. or neg. for the botulin toxin presence it the sample examined A simple box device for the test execution is described.

TOXCENTER COPYRIGHT 2005 ACS on STN L45 ANSWER 5 OF 20

ACCESSION NUMBER:

1997:197733 TOXCENTER

COPYRIGHT:

Copyright 2005 ACS

DOCUMENT NUMBER:

CA12721292350T

TITLE:

Low-acid, high-moisture processed cheese spread and

method of making

AUTHOR(S):

Adrianson, Tim M.; Brown, Alpheus I., Jr.; Busk, G. Curtis, Jr.; Gunther, Stephen A.; Huether, Karen D.;

Mann, Joseph W.; Yoss, James K.

CORPORATE SOURCE:

ASSIGNEE: Nabisco, Inc. PATENT INFORMATION: US 5670197 A 23 Sep 1997

SOURCE:

(1997) U.S., 11 pp.

CODEN: USXXAM.

COUNTRY:

UNITED STATES

DOCUMENT TYPE:

Patent

FILE SEGMENT:

CAPLUS

OTHER SOURCE:

CAPLUS 1997:636107

LANGUAGE:

English

ENTRY DATE:

Entered STN: 20011116

Last Updated on STN: 20020618

High-moisture, high-pH, shelf-stable cheese spreads containing cheese, AB preferably a cheese having a pH of 5.4 or lower such as Swiss, Cheddar, American, mozzarella, skim milk cheese, or cheese mixts., water sufficient to provide a total moisture of from 51 to 58% and a pH of from 5.3 to 6.0 are preserved by adding sodium

chloride, a phosphate salt, sodium citrate

, and sodium lactate in sufficient amts. to maintain the composition free from the growth of Clostridium botulinum and the production of

toxin by those organisms during room temperature

storage for a period of at least 180 days, preferably 300 days. Some embodiments contain 1 to 2% sodium citrate, 1 to 2% sodium lactate, and a combined level of dibasic sodium

phosphate and sodium chloride ranging

between 1.3 and 2.2%, and have a moisture content of 52 to 55%, and an overall pH of about 5.3 to 5.6.

L45 ANSWER 6 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1994:135065 TOXCENTER

COPYRIGHT:

Copyright 2005 ACS CA12015190022A

DOCUMENT NUMBER: TITLE:

Comparison of organic acid salts for Clostridium

botulinum control in an uncured turkey product

AUTHOR(S):

Miller, Arthur J.; Call, Jeffrey E.; Whiting, Richard

CORPORATE SOURCE:

Eastern Reg. Res. Cent., Agric. Res. Serv.,

Philadelphia, PA, 19118, USA.

SOURCE:

Journal of Food Protection, (1993) Vol. 56, No. 11,

pp. 958-62.

CODEN: JFPRDR. ISSN: 0362-028X.

COUNTRY:

UNITED STATES

DOCUMENT TYPE:

FILE SEGMENT:

Journal CAPLUS

OTHER SOURCE:

CAPLUS 1994:190022

571-272-2528 Searcher : Shears

LANGUAGE: English

Entered STN: 20011116 ENTRY DATE:

Last Updated on STN: 20020917

Health concerns have led consumers toward purchasing nitrite-free, AΒ low-salt meat and poultry products. Lacking these barriers to control growth of bacterial pathogens, such products carry heightened risks for botulism, especially if storage temperature is abused. address this threat, 5 organic acid salts were evaluated as potential antibotulinal agents. Ground turkey breast was formulated with 1.4% NaCl, 0.3% sodium pyrophosphate, 0-6% organic acid salts, 10% ice, and 500 spores per g of a 6-strain mixture of proteolytic C. botulinum. Vacuum-packaged product (10 g) was heated in 75° water for 20 min, cooled, and incubated for up to 18 days at 28°. Botulinal neurotoxin was detected by mouse bioassay at 2 days in samples which lacked any of the test compds. Samples containing 2% acid salt developed neurotoxin, which was detected at 2, 2, 4, 5, and 5 days for pyruvate, citrate, lactate, acetate, and propionate, resp. With 6% acid salt addns., samples remained neurotoxin free until 7 days with pyruvate, 18 days with citrate, and >18 days for the remaining compds. Monocarboxylic acid salts exhibited antibotulinal activity related to their dissociation consts. (pKa). Citrate did not fit this pattern, however, suggesting a different mechanism of action. This study reveals that a variety of organic acid salts possess activity that can be used alone or possibly in combination to enhance the safety of nitrite-free turkey products.

DUPLICATE 3 L45 ANSWER 7 OF 20 MEDLINE on STN

86220811 MEDLINE ACCESSION NUMBER: PubMed ID: 3709810 DOCUMENT NUMBER:

TLC immunostaining characterization of Clostridium TITLE:

botulinum type A neurotoxin

binding to gangliosides and free fatty acids.

AUTHOR: Takamizawa K; Iwamori M; Kozaki S; Sakaguchi G; Tanaka

R; Takayama H; Nagai Y

SOURCE: FEBS letters, (1986 Jun 9) 201 (2) 229-32.

Journal code: 0155157. ISSN: 0014-5793.

Netherlands PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

FILE SEGMENT: Priority Journals

198607 ENTRY MONTH:

Entered STN: 19900321 ENTRY DATE:

> Last Updated on STN: 19970203 Entered Medline: 19860714

The receptor structure of Clostridium botulinum AΒ

neurotoxin type A was analysed by TLC

immunostaining. GQlb was found to be the most potent receptor, and the neurotoxin also bound to GTlb and GDla, but not to GM3, GM2, GM1, GD3, GD1b and GT1a. Optimum binding of neurotoxin to the ganglioside

appeared in 0.01 M phosphate buffer (pH

7.2) containing 0.2% NaCl. Higher and lower NaCl concentrations diminished neurotoxin binding to the ganglioside. In addition, the neurotoxin was able to bind to free fatty acids. Maximum binding was observed on stearic acid and neurotoxin binding to free fatty acids was not affected by NaCl concentration.

L45 ANSWER 8 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1986:118339 TOXCENTER

Shears 571-272-2528 Searcher :

COPYRIGHT:

Copyright 2005 ACS

DOCUMENT NUMBER:

CA10415128561S

TITLE:

Use of preservatives to delay toxin

formation by Clostridium botulinum (type B, strain okra) in vacuum-packed, cooked

potatoes

AUTHOR(S):

Notermans, S.; Dufrenne, J.; Keybets, M. J. H.

CORPORATE SOURCE:

Lab. Water Food Microbiol., Natl. Inst. Public Health

Environ. Hyg., Bilthoven, 3720 BA, Neth...

SOURCE:

Journal of Food Protection, (1985) Vol. 48, No. 10,

pp. 851-5.

CODEN: JFPRDR. ISSN: 0362-028X.

COUNTRY:

**NETHERLANDS** 

DOCUMENT TYPE: FILE SEGMENT:

Journal CAPLUS

OTHER SOURCE:

CAPLUS 1986:128561

LANGUAGE:

English

ENTRY DATE:

Entered STN: 20011116

Last Updated on STN: 20050517

Storage at temps. below 4° prevents growth

and toxin production by Closridium botulinum in vacuum-packed, cooked potatoes. The use of preservatives as an addnl., built-in safety factor has been investigated. Dipping

potatoes in a solution of ascorbic [50-81-7] and citric acid [77-92-9]

before vacuum-packing and cooking (95° for 50 min) inhibited growth and toxin production by proteolytic C. botulinum

type B at an incubation temperature of 15° for 70

days and at 20° for ≥ 14 days. This

preservative treatment also resulted in an organoleptically acceptable product with a prolonged shelf life. Risk anal. showed that the presence of C. botulinum in vacuum-packed, cooked potatoes may be expected, i.e., one spore in each 1585 kg of product. A preservative treatment with a combination of ascorbic and citric acid will limit the public health risk even if the potato product is accidentally stored for a short time at a temperature higher than

L45 ANSWER 9 OF 20

MEDLINE on STN

DUPLICATE 4

ACCESSION NUMBER: 81168134 DOCUMENT NUMBER:

PubMed ID: 6783645

TITLE:

Separation and characterization of heavy and light

chains from Clostridium botulinum type C

toxin and their reconstitution.

MEDLINE

AUTHOR:

Syuto B; Kubo S

SOURCE:

Journal of biological chemistry, (1981 Apr 25) 256 (8)

3712-7.

Journal code: 2985121R. ISSN: 0021-9258.

PUB. COUNTRY: DOCUMENT TYPE: United States

LANGUAGE:

Journal; Article; (JOURNAL ARTICLE)

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

198106

ENTRY DATE:

Entered STN: 19900316

Last Updated on STN: 19970203 Entered Medline: 19810623

AB Clostridium botulinum type C toxin consists of a

heavy and a light chain with molecular weights of 98,000 and 53,000, respectively, which are linked by one disulfide bond. The two components were separated from each other by quaternary aminoethyl

> Searcher :

Shears

571-272-2528

Sephadex A-50 column chromatography by stepwise elution with NaCl in 27.5 mM borax-45 mM sodium dihydrogen phosphate buffer, pH 8.0, containing 5%

2-mercaptoethanol at 0 degrees C. The purified components had different amino acid compositions and antigenicities, and the toxicity of the toxin was neutralized completely by either anti-heavy chain Fab or anti-light chain Fab. the two components could be reconstituted to form an active molecule with recovered toxicity which varied according to the method used. Maximum recovery was obtained in a system in which the intersubunit S--S bond was first formed in the presence of high concentration of neutral salts, after which the concentration of salt was gradually decreased. The reconstituted preparation was highly toxic and had the same properties as the parental toxin on chromatography, sodium dodecyl sulfate-polyacrylamide gel electrophoresis, and immunodiffusion. By the use of three perturbants, the fractions of exposed tryptophans and tyrosines of the preparation were found to be almost the same as that of the parental toxin.

L45 ANSWER 10 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1981:87608 TOXCENTER COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA09407042392A

Isolation and properties of highly purified type TITLE:

F Clostridium botulinum

toxin

Uvarova, R. N.; Reshetnikova, L. N.; Ispolatovskaya, AUTHOR(S):

M. V.; Bulatova, T. I.

Inst. Epidemiol. Mikrobiol., Moscow, USSR. CORPORATE SOURCE:

Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, SOURCE:

(1980) No. 11, pp. 42-6.

CODEN: ZMEIAV. ISSN: 0372-9311.

COUNTRY: USSR DOCUMENT TYPE: Journal FILE SEGMENT: CAPLUS

CAPLUS 1981:42392 OTHER SOURCE:

LANGUAGE: Russian

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021203

The steps involved in the isolation of C. botulinum AB toxin were initial precipitation with (NH4)2SO4 or Na hexametaphosphate after cultivation of the culture for 4 days at 28°, ultrafiltration through amicon membrane, gel filtration on 2 sephadex G-100 columns and elution with pH 5.6 Na phosphate-phosphate buffer, chromatog. on DEAE-cellulose, dialysis in a pH 4.2 acetate buffer containing 0.1 M NaCl, chromatog. on SP-sephadex (C-50), repeating of dialysis, ultrafiltration and then gel filtration on sephadex G-200, and finally dialysis and chromatog. on

DEAE-cellulose. The activity of the purified toxin ranged 1.5-4 + 107 (min. LD)/mg protein and had a mol. weight of 50,000

daltons.

L45 ANSWER 11 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

1979:104152 TOXCENTER ACCESSION NUMBER: COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA09115118322P

TITLE: Structure and toxicity of Clostridium

botulinum type C Toxin

AUTHOR(S): Syuto, Bunei; Kubo, Shuichiro

CORPORATE SOURCE: Fac. Vet. Med., Hokkaido Univ., Sapporo, 060, Japan. SOURCE: Japanese Journal of Medical Science & Biology, (1979)

Vol. 32, No. 2, pp. 132-3.

CODEN: JJMCAQ. ISSN: 0021-5112.

COUNTRY: JAPAN
DOCUMENT TYPE: Journal
FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1979:518322

LANGUAGE: English

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021210

AB C. botulinum Toxin C could be separated into 2 peptide

chains by chromatog. of QAE-Sephadex A-50 with a linear gradient of

NaCl in 6% 2-mercaptoethanol-borate phosphate buffer at pH 8.1 and 0°. The components had

different antigenicities and antitoxin to either chain neutralized the mother toxin toxicity. Combining the 2 chains gave an active form having 74% of the toxicity of the mother toxin; thus both chains are essential for toxicity. The reconstitution method affected the toxicity of the material prepared from the chains. Tryptophan and tyrosine residues were critical to maintain the toxin toxicity.

L45 ANSWER 12 OF 20 MEDLINE on STN DUPLICATE 5

ACCESSION NUMBER: 76202136 MEDLINE

DOCUMENT NUMBER: PubMed ID: 5836

TITLE: {Extraction and concentration of Clostridium

botulinum toxins from specimens

(author's transl)].

Extraktion und Anreicherung von Clostridium botulinum-Toxinen aus dem Untersuchungsmaterial.

AUTHOR: Sonnenschein B; Bisping W

SOURCE: Zentralblatt fur Bakteriologie, Parasitenkunde,

Infektionskrankheiten und Hygiene. Erste Abteilung Originale. Reihe A: Medizinische Mikrobiologie und

Parasitologie, (1976 Mar) 234 (2) 247-59. Journal code: 0331570. ISSN: 0300-9688. GERMANY, WEST: Germany, Federal Republic of

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: German

PUB. COUNTRY:

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197608

ENTRY DATE: Entered STN: 19900313

Last Updated on STN: 19970203 Entered Medline: 19760802

AB In order to detect minimal amounts of Clostridium **botulinum toxins** in animal tissue or food specimens it is necessary to
use an extraction method which results in concentration of the

botulinal toxins. In the present examinations,

artificially contaminated canned beans were used to develop a suitable procedure for extraction and concentration of **botulinal** 

toxins A-E. The procedure consisted of 4

steps: 1. Canned beans were diluted 1:2 with 0.1 m phosphate

buffer pH 6.0. 2. The diluted material was

homogenised with an "Ultra-Turrax" homogeniser for 20 sec. 3. The monogenised material was centrifuged at 4000 rpm for 30 min. 4. 15 ml of supernatant was concentrated using a "Millipore ultrafiltration chamber" (with a membrane capable of excluding all material with a molecular weight above 25,000). A pressure of 1.5 atmospheres was

applied until the terminal volume was 0.5 ml. Following extraction and concentration, the samples were assayed for **botulinal toxin** in mice. Using this assay the concentration of the five toxins were shown to be as follows: Type A toxin: 19.0-fold toxin concentration Type B toxin: 14.8-fold toxin concentration Type C toxin: 20.6-fold toxin concentration Type D toxin: 28.2-fold toxin concentration Type E toxin: 112.2-fold toxin concentration

L45 ANSWER 13 OF 20 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 6

ACCESSION NUMBER: 1977:137266 BIOSIS

DOCUMENT NUMBER: PREV197763032130; BA63:32130

TITLE: THE MICROBIOLOGICAL ROLE OF NITRITE AND NITRATE.

AUTHOR(S): ROBERTS T A

SOURCE: Journal of the Science of Food and Agriculture, (1975)

Vol. 26, No. 11, pp. 1755-1760. CODEN: JSFAAE. ISSN: 0022-5142.

DOCUMENT TYPE: Article FILE SEGMENT: BA

LANGUAGE: Unavailable

AB In unheated products nitrite, NaCl and the pH value contribute to the selection of the bacteria which grow during storage. Nitrate is generally believed to serve only as a reservoir for nitrite, but the commercial use of nitrate-free cover brines in the Wiltshire bacon industry shows that such a reservoir is not always essential. Nitrate sometimes reduced the growth rate of bacteria in experimental Wiltshire collar bacon, but had no benefit in back bacon. The clostridia occurring naturally in the bacon grew to higher numbers in collar cured without nitrate than that cured with

B) was detected in these bacons, but did not grow in the bacon. In heated products the growth of surviving bacteria is controlled by the interaction of several factors including pH,

NaCl storage temperature and NaNO2 or a substance derived from it upon heating. Further experiments are warranted to investigate the effects of dextrose, nitrate, ascorbate and polyphosphate.

L45 ANSWER 14 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

nitrate. Clostridium botulinum (types A and

ACCESSION NUMBER: 1977:82497 TOXCENTER COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA08623169232P

TITLE: Effect of additional concentration and purification on

the antigenic activity and chemical composition of

toxoids for use in aerosol vaccines

AUTHOR(S): Shipulina, N. I.; Vasil'eva, I. P.; Didenko, L. A.;

Shapareva, S. I.; Karpov, S. P.

CORPORATE SOURCE: Tomsk. Nauchno-Issled. Inst. Vaktsin Syvorotok, Tomsk,

USSR.

SOURCE: Trudy - Tomskii Nauchno-Issledovatel'skii Institut

Vaktsin i Syvorotok, Tomskii Meditsinskii Institut [i] Tomskoe Otdelenie Vserossiiskogo Nauchno-Meditsinskogo

Obshchestva Mikrobiologov, Epidemiologov i Parazitologov, (1975) Vol. 25, pp. 159-63.

CODEN: TTVMA9. ISSN: 0130-4917.

COUNTRY: USSR
DOCUMENT TYPE: Journal
FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1977:169232

LANGUAGE: Russian

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021218

AB The toxoids of Clostridium botulinum type A,

B, and E were purified by precipitation at pH 3.3-3.5 and

dialysis against phosphate buffer pH

.6.81. C. tetani toxoids were precipitated with 15% NaCl and

dialyzed against water. The content of Ca, Na, K, SO42-, B, P, and Cl

decreased below those of starting crude toxoids. The antigenic

activity and stability during storage also decreased after the purification

L45 ANSWER 15 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1974:67187 TOXCENTER COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA08019105759J

TITLE: Germination of spores of Clostridium species capable

of causing food poisoning. II. Effects of some

chemicals on the germination of spores of C.

botulinum type A

AUTHOR(S): Ando, Yoshiaki

CORPORATE SOURCE: Hokkaido Inst. Public Health, Sapporo, Japan.

SOURCE: Shokuhin Eiseigaku Zasshi, (1973) Vol. 14, No. 5, pp.

462-6.

CODEN: SKEZAP. ISSN: 0015-6426.

COUNTRY: JAPAN
DOCUMENT TYPE: Journal
FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1974:105759

LANGUAGE: Japanese

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021218

AB Spores of C. botulinum type A 190 were heated at

70° for 10 min in 250mM phosphate buffer pH 6.7, cooled, and then incubated at 37° in

germination medium containing 5mM L-alanine, 10mM Na L-lactate, 60mM

NaHCO3, and 100mM phosphate buffer pH

6.7. Addition of 150mM D-alanine prevented germination. Addition of

≥5% NaCl or ≥1% Na sorbate to the medium

retarded germination. EDTA, dipicolinic acid, and

2-(2-furyl)-3-(5-nitro-2-furyl)acrylamide showed no effect.

L45 ANSWER 16 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1969:50680 TOXCENTER COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA07019085842U

TITLE: Purification and molecular dissociation of the

precursor of Clostridium botulinum type

E toxin

AUTHOR(S): Kitamura, Masaru; Sakaguchi, Simiko; Sakaguchi, Genji

CORPORATE SOURCE: Nat. Inst. Health, Tokyo, Japan.

SOURCE: Anaerobic Bact., Proc. Int. Workshop, 5th, (1968) pp.

213-22.

CODEN: 20QCAI.

COUNTRY: JAPAN
DOCUMENT TYPE: Conference
FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1969:85842

LANGUAGE: English

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021231

The toxin of C. botulinum type E is AB formed as a nontoxic ribonucleoprotein (I) which can be extracted from the cells with 0.2M phosphate buffer, pH 6.0. The protein moiety is purified by precipitation of I by half-saturated (NH4)2SO4, chromatog. on CM-Sephadex C-50 (II) at pH 6.0 (0.02M acetate buffer), digestion with RNase, rechromatog. on II at pH 6.0 with a linear concentration gradient of NaCl in 0.02M acetate buffer, precipitation by half-saturated (NH4)2SO4, chromatog. on Sephadex G-200, and rechromatog. on II. The toxicity of the product for mice was 2-8LD50/mg. N, but activation by trypsin raised this to 5-10 LD50/mg. The material appeared homogeneous on disk electrophoresis ( pH 4) and on ultracentrifugation (pH 4.5 or 6.0, s20, W 11.3-12.3 S), but gave 2 distinct precipitin lines on immunodiffusion and 2 distinct zones on electrophoresis (cellulose acetate) at pH 7. Ultracentrifugation at pH 8 (0.05M Veronal buffer) gave a single major band, s20, W 7.3 S. Starch-gel electrophoresis at pH 8 (0.05M Veronal buffer) gave partial separation into anodic and cathodic peaks; only the latter gave active toxin after treatment with trypsin.

L45 ANSWER 17 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1968:24747 TOXCENTER COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA06805020941Q

TITLE: Demonstration of bacterial toxins in foodstuffs by

means of immunofluorescence

AUTHOR(S): Riemann, Hans

CORPORATE SOURCE: Sch. of Vet. Med., Univ. of California, Davis, CA,

USA.

SOURCE: Nordisk Veterinaermedicin, (1967) Vol. 19, No. 4, pp.

188-94.

CODEN: NOVTAV. ISSN: 0029-1579.

COUNTRY: UNITED STATES

DOCUMENT TYPE: Journal FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1968:20941

LANGUAGE: Danish

ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20021231

Staphylococcal enterotoxin B antitoxin, obtained from rabbits, was conjugated with fluorescein isothiocyanate and purified on DEAE-cellulose and Sephadex columns. The conjugate was adsorbed to nontoxin-producing staphylococcal strains and purified as Sephadex. To avoid false neg. results due to extracellular localization of toxin, the conjugate and culture, after incubation at 30° for 30 min. and at 20° for 4 hrs., were filtered through a 0.22-μ pore filter plus Whatman Number 1 filter paper. preparates were prepared by growing cultures on dialysis membranes mounted on blood-agar. The preparate was freeze-dried and colored by incubation with conjugate at 37°. With these methods 1  $\gamma$  toxin/ml. sample was detected. In a quant. modification, antiserum and agar were mixed (50:50) and poured into small glass tubes. Test solution was pipetted on the gel and after 1-7 days incubation, the amount of toxin was estimated, being related to the distance between the surface and the line of precipitation With this method 4  $\gamma/ml$ . were detectable after 8 days and 8  $\gamma$ /ml. after 1 day. The toxin was identified by gel-diffusion technique. These methods were used for determination of

toxin in various foods. It was found that  $1-10 \gamma$  toxin was formed per g. ham on anaerobic storage for 8-13 days at room temperature The amount of toxin formed varied according to pH and salt concentration At pH 6.9 and NaCl concentration 10-12 g./100 ml. and pH 5.1 and NaCl concentration 4 g./100 ml. both totally inhibited production of toxin. Com. Clostridium botulinum E antiserum was purified by precipitation with (NH4) 2SO4 and chromate on Sephadex and in two steps adsorbed to nontoxin-producing and toxin-producing C. botulinum E. Com. rabbit antihorse serum  $\gamma$ -globulin, conjugated with fluorescein isothiocyanate was dialyzed against a phosphate buffer and chromatographed on a DEAE-cellulose column. Preparates were incubated with antitoxin for 0.5-1 hr. at 37° and again under the same conditions with rabbit antihorse serum. Neither nontoxic strain E nor strain A or B or pseudobotulinum E from toxic cultures of strain E showed fluorescence with reagent. Toxic cultures of strain E showed no fluorescence when tested against antitoxin A or B. Incubations of ham showed, when tested on mice, that toxin was produced when the salt concentration decreased under 2.5 g./100 ml. H2O; these expts., however, were neg. to the fluorescence being described.

L45 ANSWER 18 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

1962:14272 TOXCENTER ACCESSION NUMBER: Copyright 2005 ACS COPYRIGHT: DOCUMENT NUMBER: CA05608045110H

Decontamination of drinking water with mobile TITLE:

equipment

AUTHOR(S): Mehls, Karl F. H.

GWF, das Gas- und Wasserfach, (1961) Vol. 102, pp. SOURCE:

1365-9.

CODEN: GAWFAN. ISSN: 0367-3839.

DOCUMENT TYPE: Journal FILE SEGMENT: **CAPLUS** 

OTHER SOURCE: CAPLUS 1962:45110 Entered STN: 20011116 ENTRY DATE:

Last Updated on STN: 20031104

This is an abridgment of an article to be published as a Dechema AB monograph. A discussion is presented of the field use of mobile equipment to remove radioactivity, bacteria, viruses, botulins, and war gases from drinking water. In general, better results are secured by adding filter material, reagents, etc., to the water than by using fixed filter beds. Kieselquhr can be treated with Ag to have a bactericidal effect. Cl kills bacteria and viruses and destroys biol. warfare materials such as the botulinus toxins in a few min. This is most conveniently supplied as NaClO from the electrolysis of NaCl solns., although Ca(ClO)2 can also be used. Where war gases such as phosphate esters, are present, these can be removed by hydrolysis at a high pH in the presence of hypochlorite. Adsorption followed by precipitation and the use of

flocculants is also suggested. Radioactivity can readily be removed by mixed-bed deionization filters, but the mixed-bed resin deteriorates with time, especially when stored at elevated temps. Handling of the contaminated resin and regeneration is also a problem. M. uses a cation exchanger operating on a Na cycle. Patent coverage on decontamination processes is cited.

L45 ANSWER 19 OF 20 TOXCENTER COPYRIGHT 2005 ACS on STN

Shears 571-272-2528 09/393590.

ACCESSION NUMBER: 1947:348 TOXCENTER

COPYRIGHT: Copyright 2005 ACS DOCUMENT NUMBER: CA04105006248E

TITLE: Molecular weight and homogeneity of crystalline

botulinus A toxin

AUTHOR(S): Putnam, Frank W.; Lamanna, Carl; Sharp, D. G.

CORPORATE SOURCE: Camp Detrick, Frederick, MD.

SOURCE: Journal of Biological Chemistry, (1946) Vol. 165, pp.

735-6.

CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Journal FILE SEGMENT: CAPLUS

OTHER SOURCE: CAPLUS 1947:6248
ENTRY DATE: Entered STN: 20011116

Last Updated on STN: 20030624

AB cf. C.A. 40, 4767.2, 6121.2. The electrophoretic, sedimentation, and diffusion characteristics of crystalline Clostridium botulinum

type A toxin have been studied in 0.1 N Na

acetate buffer, pH 4.38. The toxin is

electrophoretically homogeneous and has a mobility of 2.75 + 10-5 sq. cm. volt-1 sec.-1. The ultracentrifugal sedimentation diagrams show a single symmetrical boundary and yield a value of S20 = 17.3 Svedberg units. The diffusion constant of a 0.63% solution at

25° by the refractometric scale method is 2.14

+ 10-7 sq. cm. sec.-1. Satisfactory agreement at successive time intervals among the values calculated by different methods and a good fit of the normalized diffusion curves with the ideal distribution curve have been realized. The boundary spread in the ultracentrifuge is greater than that attributable to diffusion alone. If a partial sp. volume of 0.75 is assumed, the mol. weight calculated from S20 and D20

is

900,000 (cf. C.A. 40, 6560.1); this suggests the presence of 2.1  $\pm$  107 mols. per mouse LD50. A tentative frictional value of 1.76 is assigned. If the mols. are assumed to be prolate elipsoids, this figure corresponds to an axial ratio, b/a = 14.6, neglecting hydration.

L45 ANSWER 20 OF 20 FEDRIP COPYRIGHT 2005 NTIS on STN

ACCESSION NUMBER: 2005:135428 FEDRIP

NUMBER OF REPORT: AGRIC 0187659

RESEARCH TITLE: ENZYMOLOGY OF MICROBIAL DEGRADATION OF ORGANIC

COMPOUNDS

STAFF: Principal Investigator: (x ray crystallography)

Chase, T.

PERFORMING ORGN: RUTGERS UNIVERSITY, BIOCHEMISTRY & MICROBIOLOGY,

NEW BRUNSWICK, NEW JERSEY, 08903

FUNDING: HATCH | C H

FILE SEGMENT: Department of Agriculture

To determine characteristics (substrate specificity, kinetic mechanism, native subunit structure) of microbial enzymes involved in degradation of polluting organic compounds. Enzymes to be studied include aromatic alcohol:NAD oxyoreductase, nitrobenzoate reductase, hydroxylaminobenzoate lyase, and gentisate and 1-hydroxy-2-naphthoate oxygenases. To identify the activity of an unidentified gene product linked to aromatic alcohol dehydrogenase, and thus to determine what compounds these enzymes make the organism ableto degrade. The enzymes, which have been cloned, will be expressed in Escherichia coli, and substrate specificity survayed in crude extracts. Enzymes then will be purified for study of the kinetic characteristics and mechanism on

selected substrates, native molecular weight determination by gel filtration, and possible X-ray crystallographic determination of structure. Kinetic studies will include variation of concentration of both substrates and use of product and dead-end inhibitors. The function of an unidentified gene product will be investigated by insertion of an intervening sequence into the chromosomal gene and observation of loss of ability to grow on some substrates, to suggest enzymatic function of the gene product.PR pseudoalcaligenes JS45, expressed in E. coli, have been purified to near homogeneity. Kinetic study of the YH105 reductase, varying concentrations of both 4-nitrobenzoate and NADPH, showed a sequential mechanism (intersecting plots of 1/v vs. 1/NADPH]) and substrate inhibition at [4-nitrobenzoate] above 0.25 mM. This contrasts with known nitroaromatic reductases such as that of Escherichia coli, which have ping-pong mechanisms, NADPH reducing the bound FMN which subsequently reduces the substrate. The limiting Michaelis constant for 4-nitrobenzoate is 0.0326+/-0.004 mM, and for NADPH 0.0154+/-.00375mM. The substrate inhibition is competitive vs. NADPH, i.e. slopes of plots of 1/v vs. 1/[NADPH] increase again at higher 4-nitrobenzoate concentrations. The nitroaromatic reductase of Ralstonia eutropha JMP134 similarly shows a sequential mechanism, limiting Michaelis constant for 3-nitrophenol = 2.43+/-0.14 micromolar, for NADPH 9.61+/-1.3 micromolar. Comparison of 4-nitrophenol and 4-nitrosophenol (the intermediate product/substrate of the 4-electron reduction) at pH 5.8 (where both are predominantly neutral) also showed a sequential mechanism, 4-nitrosphenol having a much lower Michaelis constant, and both showing substrate inhibition above 0.25 mM. Thus substrate inhibition is not a feature only of the four-electron, two-NADPH reduction. The purified YH105 enzyme appears to be active without FMN, unlike other nitroaromatic reductases (including those of JS45 and JMP134). Kinetic study of the JS45 enzyme has not proceeded as far (the Michaelis constant for NADPH is high, above 0.2 mM, and for nitrobenzene very low), but it has been found that the enzyme is five times as active in phosphate buffer as in MOPS (3-morpholinopropanesulfonic acid). The other enzymes show slightly higher activity in phosphate. The hydroxylaminobenzoate lyase of YH105, like that of Comamonas acidovorans NBA-10 (Groenewegen, P.E.J., and de Bont, J.A.M., Arch. Microbiol. 158:381-6 [1992]) is stabilized by NADH. In an attempt to find the function of cinnamyl alcohol dehydrogenase of Burkholderia cepacia DBO-1 (a similar gene is found in E. coli and other microrganisms), we have been trying to knock out the gene by insertion of a kanamycin resistance cassette. At least one mutant has been obtained. It grows on aromatic substrates (phthalate, coumarate, benzyl alcohol, phenylalanine) only when supplemented with yeast extract, unlike the wild type organism, suggesting a possible role in coenzyme biosynthesis.PB

FILE 'MEDLINE' ENTERED AT 12:12:12 ON 27 OCT 2005

FILE LAST UPDATED: 26 OCT 2005 (20051026/UP). FILE COVERS 1950 TO DATE.

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http://www.nlm.nih.gov/mesh/ http://www.nlm.nih.gov/pubs/techbull/nd04/nd04 mesh.html

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MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

L46		4451	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"BOTULINUM TOXINS"/CT
L47		39392	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	PHOSPHATES/CT
L48		1435	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"SUCCINIC ACID"/CT
L49		15019	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	ACETATES/CT
L50	•	11647	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	CITRATES/CN
L51		7	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L46 AND (L47 OR L48 OR
			L49	OR L50)			

L51 ANSWER 1 OF 7
ACCESSION NUMBER: 89264465 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2471189

TITLE: Granulocyte-macrophage colony-stimulating factor and

human neutrophils: role of quanine nucleotide

regulatory proteins.

AUTHOR: Gomez-Cambronero J; Yamazaki M; Metwally F; Molski T F;

Bonak V A; Huang C K; Becker E L; Sha'afi R I

CORPORATE SOURCE: Department of Physiology, University of Connecticut

Health Center, Farmington 06032.

CONTRACT NUMBER: AI-09648 (NIAID)

AI-24935 (NIAID) GM-37694 (NIGMS)

+

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America, (1989 May) 86 (10) 3569-73.

Journal code: 7505876. ISSN: 0027-8424.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198906

ENTRY DATE: Entered STN: 19900309

Last Updated on STN: 20021218 Entered Medline: 19890628

ED Entered STN: 19900309

Last Updated on STN: 20021218 Entered Medline: 19890628

AB The addition of granulocyte-macrophage colony-stimulating factor (GM-CSF) to human neutrophils causes a rapid increase in the basal and fMet-Leu-Phe-stimulated Na+ influx and an increase in intracellular pH. The increase can be seen as early as 5 min after the addition of GM-CSF. Changes produced by GM-CSF are totally inhibited by amiloride and are significantly reduced in pertussis toxin-treated cells. The stimulation of the Na+/H+ exchange mechanism by GM-CSF inhibits further stimulation of this system with either fMet-Leu-Phe or phorbol 12-myristate 13-acetate. In addition, membrane preparations isolated from GM-CSF-treated neutrophils have higher basal and stimulated GTPase activities. The basal and the fMet-Leu-Phe- or platelet-activating factor-stimulated GTPase activities are reduced in pertussis toxin-treated cells. Cells pretreated with GM-CSF accumulate more radioactive phosphate than control cells, and this

increase is diminished by pertussis toxin treatment. In addition, GM-CSF causes a rapid increase in the tyrosine phosphorylation levels of five proteins with molecular masses of 118 kDa, 92 kDa, 78 kDa, 54 kDa, and 40 kDa. These results clearly show that GM-CSF, on its own, can initiate several changes and that these changes are mediated in part by the pertussis toxin-sensitive guanine nucleotide regulatory protein.

L51 ANSWER 2 OF 7 MEDLINE on STN ACCESSION NUMBER: 87190484 MEDLINE DOCUMENT NUMBER: PubMed ID: 3569302

TITLE: Botulinum C2 toxin ADP-ribosylates actin and

disorganizes the microfilament network in intact cells.

AUTHOR: Reuner K H; Presek P; Boschek C B; Aktories K

SOURCE: European journal of cell biology, (1987 Feb) 43 (1)

134-40.

Journal code: 7906240. ISSN: 0171-9335. GERMANY, WEST: Germany, Federal Republic of

PUB. COUNTRY: GERMANY, WEST: Germany, Federal Rep DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198705

ENTRY DATE: Entered STN: 19900303

Last Updated on STN: 19970203 Entered Medline: 19870528

ED Entered STN: 19900303

Last Updated on STN: 19970203 Entered Medline: 19870528

AB Botulinum C2 toxin ADP-ribosylates actin in [32P]orthophosphatelabelled intact chick embryo cells (CEC). The toxin-induced rounding up of CEC is correlated with ADP-ribosylation of actin in intact cells in a time and concentration-dependent manner. Both, rounding up of cells and actin ADP-ribosylation, depend on the presence of both components of botulinum C2 toxin (components I and II) and are independent of the ability of CEC to divide. Treatment of CEC with botulinum C2 toxin induced a time-dependent disorganization of the typical architecture of the microfilament network as shown by fluorescein-phalloidin staining. Botulinum C2 toxin decreased the amount of Triton X-100 insoluble actin, while the fraction of Triton soluble actin was increased. Actin, which was 32P-labelled by botulinum C2 toxin in intact CEC, was recovered in the Triton soluble but not in the Triton insoluble actin fraction. It is suggested that in intact CEC botulinum C2 toxin causes ADP-ribosylation of G-actin but not of F-actin thereby leading to an accumulation in the pool of monomeric actin.

L51 ANSWER 3 OF 7 MEDLINE on STN ACCESSION NUMBER: 85278125 MEDLINE DOCUMENT NUMBER: PubMed ID: 2992374

TITLE: Inhibition of Clostridium botulinum 52A toxicity and

protease activity by sodium acid pyrophosphate in media

systems.

AUTHOR: Wagner M K; Busta F F

SOURCE: Applied and environmental microbiology, (1985 Jul) 50

(1) 16-20.

Journal code: 7605801. ISSN: 0099-2240.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

Priority Journals FILE SEGMENT:

198509 ENTRY MONTH:

ENTRY DATE: Entered STN: 19900320

> Last Updated on STN: 19970203 Entered Medline: 19850916

Entered STN: 19900320 ED

Last Updated on STN: 19970203 Entered Medline: 19850916

The effects of two pH levels (5.55 or 5.85) in combination with 0.4% AB sodium acid pyrophosphate (SAPP), NaH2PO4 X H2O, Na2HPO4 X 7H2O, or NaCl on the growth and toxicity of Clostridium botulinum 52A were studied. Absorbancy measurements at 630 nm, microscopic observations, and the mouse bioassay procedure were used to observe the effects. At pH 5.55 and 5.85 most control cultures exhibited toxicity when cell lysis began. Vegetative cell development was normal (4 micron long; 1 micron wide). SAPP-containing (0.4%) treatment cultures displayed similar growth and lysis but no or delayed (48 h) toxicity. Cells grown in the SAPP treatment culture were longer and wider (6 micron long; 1.5 micron wide) than in most other treatment cultures. Trypsinization of nontoxic supernatants from 0.4% SAPP resulted in toxicity. Addition of 0.4% SAPP to toxic C. botulinum supernatant delayed but did not prevent death of mice. The addition of various levels of SAPP to toxic supernatants resulted in a decrease in zone size with an increase in the level of SAPP (9 mm with 0.4% SAPP to 7 mm with 1.0% SAPP), using a dual substrate protease assay. A decrease in the zone size also occurred with the supernatant from cultures grown in the presence of SAPP and with Bacillus polymyxa protease dilutions containing 0.4% SAPP. Results suggest that the actual production or function of the protease responsible for toxin activation may have been inhibited by the presence of SAPP.

L51 ANSWER 4 OF 7 MEDLINE on STN ACCESSION NUMBER: 73221663 MEDLINE DOCUMENT NUMBER: PubMed ID: 4719441

TITLE: Disulfide-toxicity relationship of botulinal toxin

types A, E, and F.

Sugiyama H; Das Gupta R; Yang K H AUTHOR:

Proceedings of the Society for Experimental Biology and SOURCE:

Medicine. Society for Experimental Biology and Medicine

(New York, N. Y.), (1973 Jul) 143 (3) 589-91.

Journal code: 7505892. ISSN: 0037-9727.

United States PUB. COUNTRY:

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

197309 ENTRY MONTH:

Entered STN: 19900310 ENTRY DATE:

Last Updated on STN: 19970203 Entered Medline: 19730924

Entered STN: 19900310 ED

Last Updated on STN: 19970203 Entered Medline: 19730924

L51 ANSWER 5 OF 7 MEDLINE on STN ACCESSION NUMBER: 73026881 MEDLINE DOCUMENT NUMBER: PubMed ID: 4342990

TITLE: Ultrastructural studies of the effects of various

agents on the motor neurons of the spinal cord.

AUTHOR: Yates R D; Yates J C

SOURCE: American journal of anatomy, (1972 Nov) 135 (3) 345-57.

Journal code: 0376312. ISSN: 0002-9106.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197301

ENTRY DATE: Entered STN: 19900310

Last Updated on STN: 19970203 Entered Medline: 19730103

ED Entered STN: 19900310

Last Updated on STN: 19970203 Entered Medline: 19730103

L51 ANSWER 6 OF 7 MEDLINE on STN ACCESSION NUMBER: 72092593 MEDLINE DOCUMENT NUMBER: PubMed ID: 4944802

TITLE: Heat resistance of spores of marine and terrestrial

strains of Clostridium botulinum type C.

AUTHOR: Segner W P; Schmidt C F

SOURCE: Applied microbiology, (1971 Dec) 22 (6) 1030-3.

Journal code: 7605802. ISSN: 0003-6919.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197204

ENTRY DATE: Entered STN: 19900310

Last Updated on STN: 19970203 Entered Medline: 19720404

ED Entered STN: 19900310

Last Updated on STN: 19970203 Entered Medline: 19720404

L51 ANSWER 7 OF 7 MEDLINE on STN ACCESSION NUMBER: 70107475 MEDLINE DOCUMENT NUMBER: PubMed ID: 4312998

TITLE: A study of the effect of ionizing radiation on

resistance, germination, and toxin synthesis of Clostridium botulinum spores, types A, B, and E.

COO-1095-3.

AUTHOR: Graikoski J T; Kempe L L

SOURCE: COO [reports]. U. S. Atomic Energy Commission, (1966

Jan 14) 1-100.

Journal code: 21830370R.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197003

ENTRY DATE: Entered STN: 19900101

Last Updated on STN: 19970203 Entered Medline: 19700322

ED Entered STN: 19900101

Last Updated on STN: 19970203 Entered Medline: 19700322

(FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN, TOXCENTER, PASCAL, FEDRIP, DISSABS' ENTERED AT 12:14:47 - Author (5) ON 27 OCT 2005) 512 S "MOYER E"?/AU L52 37 S "HIRTZER P"?/AU L53 3 S L52 AND L53 L54 3 S (L52 OR L53) AND L28 L55 3 S L54 OR L55 L56 1 DUP REM L56 (2 DUPLICATES REMOVED) L57 L57 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1 ACCESSION NUMBER: 2000:190943 CAPLUS DOCUMENT NUMBER: 132:227422 Stable liquid formulations of Botulinum TITLE: toxin INVENTOR(S): Moyer, Elizabeth; Hirtzer, Pamela Elan Pharmaceuticals, Inc., USA PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 36 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 1999-US20912 W 19990909

The invention includes liquid formulations of botulinum toxin that are stable to storage in liquid form at standard refrigerator temps. for at least 1-2 yr and to storage at higher temps. for at least 6 mo. The invention also includes methods of treatment using such formulations and uses of such formulations in the manufacture of medicaments for various therapeutic and cosmetic treatments. A formulation was prepared containing Botulinum toxin Type B 500±100 LD50U/mL, di-Na succinate 10 mM, NaCl 100 mM, human albumin 0.5 mg/mL, and HCl for pH adjustment.

	FILE 'HCAPLUS' ENTERED AT 14:53:15 ON 27 OCT 2005	rected L# Naci RN
L58	3 17 S L28 AND L14	
L59	2 S L58 AND (L24 OR HSA OR ALBUMIN OR GELATIN)	cected Ly
L60	4 S L58 AND BUFFER?	Naci RN
L61	1 S L60 AND (TEMP OR TEMPERATURE)	1
L62	0 S (L59 OR L61) NOT (L30 OR L36)	
	FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC,	PHIN,
	TOXCENTER, PASCAL, FEDRIP, DISSABS' ENTERED AT 14:53:52 ON 27 OC	CT 2005
L63	3 4 S L59	
L64	1 S L61	
L65	0 S (L63 OR L64) NOT (L32 OR L44)	
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(FILE 'HOME' ENTERED AT 11:40:58 ON 27 OCT 2005) SET COST OFF

	7777 IDECTORDAL DAMEDED AM 11.41.00 ON 27 OCM 2005
	FILE 'REGISTRY' ENTERED AT 11:41:09 ON 27 OCT 2005 E BOTOX/CN 5
L1	1 SEA ABB=ON PLU=ON BOTOX/CN
	D CN
_	E BOTULIN TOXIN/CN 5
L2	•
L3 L4	
L5	
L6	134 SEA ABB=ON PLU=ON (BOTULIN A ? OR BOTULIN B ? OR BOTULIN
	C1 ? OR BOTULIN C2 ? OR BOTULIN D ? OR BOTULIN E ? OR
	BOTULIN F ?)/CN
L7	2 SEA ABB=ON PLU=ON (BOTULINUM A ? OR BOTULINUM B ? OR
	BOTULINUM C1 ? OR BOTULINUM C2 ? OR BOTULINUM D ? OR BOTULINUM E ? OR BOTULINUM F ?)/CN
L8	156 SEA ABB=ON PLU=ON L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7
по	130 BER IND ON THE ON DE ON DE ON DE ON DE ON DE ON DE
	E PHOSPHATE/CN
L9	
	OR "PHOSPHATE (H2PO4-)"/CN OR "PHOSPHATE (H2PO41-)"/CN OR
	"PHOSPHATE (HPO42-)"/CN OR "PHOSPHATE (P2O74-)"/CN OR "PHOSPHATE (P6O186-)"/CN OR "PHOSPHATE (P6O186-)"/CN OR
	("PHOSPHATE (PO3-)"/CN OR "PHOSPHATE (PO31-)"/CN OR
	"PHOSPHATE (PO32-)"/CN) OR "PHOSPHATE (PO43-)"/CN OR
	"PHOSPHATE (PO4H2-)"/CN
	E CITRATE/CN 5
L10	
L11	E ACETATE/CN 5 1 SEA ABB=ON PLU=ON ACETATE/CN
	E SUCCINATE/CN 5
L12	1 SEA ABB=ON PLU=ON SUCCINATE/CN
	D CN
L13	12 SEA ABB=ON PLU=ON L9 OR L10 OR L11 OR L12 445 SEA ABB=ON PLU=ON SODIUM CHLORIDE ?/CN
1114	E BONT/CN 5
	2 2011/01/0
	FILE 'HCAPLUS' ENTERED AT 11:45:22 ON 27 OCT 2005
T 1 E	FILE 'REGISTRY' ENTERED AT 11:47:35 ON 27 OCT 2005 6 SEA ABB=ON PLU=ON (BOTULIN G ? OR BOTULINUM G ?)/CN
L15 L16	·
пто	101 SEA ABB-ON THO-ON HO ON HIS
	FILE 'HCAPLUS' ENTERED AT 11:47:44 ON 27 OCT 2005
_	DEL 3892 S L16 OR (BO BOTULIN?) (5A) (NT OR TOXIN OR NEUROTOXIN OR TOX
L17	4721 SEA ABB=ON PLU=ON L16 OR (BO OR BOTULIN?) (5A) (NT OR
	TOXIN OR NEUROTOXIN OR TOX#) OR BOTOX# OR BONT# OR BOTX# OR (BT OR BN OR BNT#)(S)BOTULIN? OR BOTULIN?(3A)(A OR B OR
	C1 OR C2 OR D OR E OR F OR G)
L18	·
	OR SUCCINATE OR SUCCINIC OR BUTANEDIOIC OR ACETIC
L19	
L20	63 SEA ABB=ON PLU=ON L19 AND (14 OR NACL OR (NA OR SODIUM) (W
	) (CL OR CHLORIDE) OR SALINE)

L21 L22 L23 L24	E SERUM ALBUMIN/CN 5 62 SEA ABB=ON PLU=ON SERUM ALBUMIN ?/CN E GELATINS/CN 5 1 SEA ABB=ON PLU=ON GELATINS/CN 66 SEA ABB=ON PLU=ON L21 OR L22 OR L23
L25 L26	FILE 'HCAPLUS' ENTERED AT 11:50:43 ON 27 OCT 2005  3 SEA ABB=ON PLU=ON L20 AND (L24 OR HSA OR SER## ALBUMIN OR GELATIN)  8 SEA ABB=ON PLU=ON L20 AND (L24 OR HSA OR ALBUMIN OR
	GELATIN)
	FILE 'REGISTRY' ENTERED AT 11:52:32 ON 27 OCT 2005
	FILE 'HCAPLUS' ENTERED AT 11:52:32 ON 27 OCT 2005  D QUE L26 D L26 1-8 .BEVSTR
	FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN, TOXCENTER, PASCAL, FEDRIP, DISSABS' ENTERED AT 11:52:33 ON 27 OCT 2005
L27	FILE 'HCAPLUS' ENTERED AT 11:54:16 ON 27 OCT 2005 6302 SEA ABB=ON PLU=ON L16 OR (BO OR BOTULIN?) (5A) (NT OR TOXIN OR NEUROTOXIN OR TOX#) OR BOTOX# OR BOTX# OR BTX# OR (BT OR BN OR BNT#) (S) BOTULIN? OR BOTULIN? (3A) (A OR B OR C1 OR C2 OR D OR E OR F OR G)
L28 L29	290 SEA ABB=ON PLU=ON L27 AND L18
	) (CL OR CHLORIDE) OR SALINE) DEL 3 S L29 AND (L24 OR HSA OR SER## ALBUMIN OR GELATIN)
L30	
L31	_
L32 L33	FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN, TOXCENTER, PASCAL, FEDRIP, DISSABS' ENTERED AT 11:55:55 ON 27 OCT 2005  16 SEA ABB=ON PLU=ON L30  11 DUP REM L32 (5 DUPLICATES REMOVED)  D 1-11 IBIB ABS
L34 L35 L36	FILE 'HCAPLUS' ENTERED AT 11:59:55 ON 27 OCT 2005  22 SEA ABB=ON PLU=ON L29 AND BUFFER?  16 SEA ABB=ON PLU=ON L29 AND (TEMP OR TEMPERATURE)  28 SEA ABB=ON PLU=ON (L34 OR L35) NOT L30  D KWIC  D 1-28 IBIB ABS
L37	FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN, TOXCENTER, PASCAL, FEDRIP, DISSABS' ENTERED AT 12:02:38 ON 27 OCT 2005 63 SEA ABB=ON PLU=ON L34
L38 L39	
L40	D KWIC 4 SEA ABB=ON PLU=ON L39 AND (TEMP OR TEMPERATURE)

```
D KWIC
              O SEA ABB=ON PLU=ON L38 AND CENTIGRADE
L41
             O SEA ABB=ON PLU=ON L38 AND CELSIUS
L42
             9 SEA ABB=ON PLU=ON L38 AND (STORE# OR STORING OR STORAGE)
L43
                D KWIC
             39 SEA ABB=ON PLU=ON (L39 OR L43) NOT L32
L44
             20 DUP REM L44 (19 DUPLICATES REMOVED)
L45
                D QUE L39
                D QUE L43
                D L45 1-20 IBIB ABS
     FILE 'MEDLINE' ENTERED AT 12:12:12 ON 27 OCT 2005
                E BOTULINUM TOXINS/CT 5
           4451 SEA ABB=ON PLU=ON "BOTULINUM TOXINS"/CT
L46
                E BOTULINUM NEUROTOXINS/CT 5
                E PHOSPHATES/CT 5
          39392 SEA ABB=ON PLU=ON PHOSPHATES/CT
L47
                E SUCCINIC ACID/CT 5
           1435 SEA ABB=ON PLU=ON "SUCCINIC ACID"/CT
L48
                E ACETATES/CT 5
          15019 SEA ABB=ON PLU=ON ACETATES/CT
L49
                E CITRATE/CN 5
                E CITRATES/CN 5
L50
          11647 SEA ABB=ON PLU=ON CITRATES/CN
              7 SEA ABB=ON PLU=ON L46 AND (L47 OR L48 OR L49 OR L50)
L51
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                D 1-7 .BEVERLYMED
     FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO,
     PHIC, PHIN, TOXCENTER, PASCAL, FEDRIP, DISSABS' ENTERED AT 12:14:47
     ON 27 OCT 2005
                                    "MOYER E"?/AU
L52
            512 SEA ABB=ON PLU=ON
                                    "HIRTZER P"?/AU
L53
             37 SEA ABB=ON PLU=ON
L54
              3 SEA ABB=ON PLU=ON
                                   L52 AND L53
              3 SEA ABB=ON PLU=ON
                                   (L52 OR L53) AND L28
L55
              3 SEA ABB=ON PLU=ON L54 OR L55
L56
              1 DUP REM L56 (2 DUPLICATES REMOVED)
L57
                D IBIB ABS
     FILE 'HOME' ENTERED AT 12:19:21 ON 27 OCT 2005
                D COST
     FILE 'HCAPLUS' ENTERED AT 14:43:46 ON 27 OCT 2005
L*** DEL
             17 S L19 AND L14
L*** DEL
              2 S L58 AND (L24 OR HSA OR ALBUMIN OR GELATIN)
L*** DEL
             4 S L58 AND BUFFER?
L*** DEL
             1 S L60 AND (TEMP OR TEMPERATURE)
L*** DEL
             17 S L28 AND L14
L*** DEL
             2 S L58 AND (L24 OR HSA OR ALBUMIN OR GELATIN)
L*** DEL
             4 S L58 AND BUFFER?
L*** DEL
              1 S L60 AND (TEMP OR TEMPERATURE)
L*** DEL
              0 S (L59 OR L61) NOT (L30 OR L36)
     FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN,
     TOXCENTER, PASCAL, FEDRIP, DISSABS' ENTERED AT 14:49:14 ON 27 OCT 2005
L*** DEL
              4 S L59
                D QUE L14
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	FILE 'HCAPLUS'	ENTERED	AT 14:5	3:15 ON 27 OCT 2005
L58	17 SEA	ABB=ON	PLU=ON	L28 AND L14
L59	2 SEA	ABB=ON	PLU=ON	L58 AND (L24 OR HSA OR ALBUMIN OR
	GEI	ATIN)		
L60	4 SEA	ABB=ON	PLU=ON	L58 AND BUFFER?
L61	1 SEA	ABB=ON	PLU=ON	L60 AND (TEMP OR TEMPERATURE)
L62	0 SEA	ABB=ON	PLU=ON	(L59 OR L61) NOT (L30 OR L36)
	FILE 'MEDLINE,	BIOSIS,	EMBASE,	WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN,
				SABS' ENTERED AT 14:53:52 ON 27 OCT 2005
L63	-	ABB=ON		
L64	1 SEA	ABB=ON	PLU=ON	L61
L65	0 SEA	ABB=ON	PLU=ON	(L63 OR L64) NOT (L32 OR L44)

FILE 'HOME' ENTERED AT 14:59:15 ON 27 OCT 2005

FILE HOME

## FILE REGISTRY

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#### FILE MEDLINE

FILE LAST UPDATED: 26 OCT 2005 (20051026/UP). FILE COVERS 1950 TO DA

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The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/ http://www.nlm.nih.gov/pubs/techbull/nd04/nd04 mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

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## FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 26 October 2005 (20051026/ED)

FILE RELOADED: 19 October 2003.

## FILE EMBASE

FILE COVERS 1974 TO 20 Oct 2005 (20051020/ED)

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## FILE WPIDS

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MOST RECENT DERWENT UPDATE: 200568 <200568/DW>
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FILE JICST-EPLUS

FILE COVERS 1985 TO 24 OCT 2005 (20051024/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

FILE JAPIO

FILE LAST UPDATED: 4 OCT 2005 <20051004/UP>
FILE COVERS APR 1973 TO JUNE 30, 2005

<<< GRAPHIC IMAGES AVAILABLE >>>

FILE PHIC

FILE COVERS CURRENT RECORDS AND IS UPDATED DAILY FILE LAST UPDATED: 26 OCT 2005 (20051026/ED)

FILE PHIN

FILE COVERS 1980 TO 21 OCT 2005 (20051021/ED)

FILE TOXCENTER

FILE COVERS 1907 TO 25 Oct 2005 (20051025/ED)

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TOXCENTER has been enhanced with new files segments and search fields. See HELP CONTENT for more information.

TOXCENTER thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary. See http://www.nlm.nih.gov/mesh/ and http://www.nlm.nih.gov/pubs/techbull/nd04/nd04\_mesh.html for a description of changes.

FILE PASCAL

FILE LAST UPDATED: 24 OCT 2005 <20051024/UP>

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Set
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             X??) OR BOTOX?? OR BONT?? OR BOTX?? OR BTX?? OR (BT OR BN OR -
             BNT??) (10N) BOTULIN? OR BOTULIN? (3N) (A OR B OR C1 OR C2 OR D OR
              E OR F OR G)
                PHOSPHATE OR SUCCINATE OR SUCCINIC OR ACETATE OR CITRATE OR
S3
              BUTANEDIOIC OR ACETIC
          901
S4
                S2 AND S3
                S4 AND (NACL OR (NA OR SODIUM) (W) (CL OR CHLORIDE) OR SALIN-
S5
          335
                S5 AND (HSA(S)ALBUMIN OR SER??(W)ALBUMIN OR GELATIN? ?)
S6
          158
          146
S7
                S6 AND BUFFER?
          131 S7 AND (TEMP? ? OR TEMPERATURE? ?)
S8
                S8 AND (PH OR (HYDROGEN OR H) (W) ION)
S9
          125
           7
                S9 AND (CENTIGRADE OR CELSIUS)
S10
                S9 AND ((UNIT? ? OR U)(2N)(ML OR MILLILIT? OR MILLI(W)(LIT-
           33
S11
             ER? OR LITRE?)))
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           39
                S10 OR S11
S13
           39
                RD (unique items)
>>>No matching display code(s) found in file(s): 65, 113
               (Item 1 from file: 348)
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Compounds that block C5a complement receptor and their use in therapy
Substanzen die der C5a Komplementrezeptor blockieren und deren Verwendung
    in der Therapie
Composes qui bloquent le recepteur du complement C5a et leur utilisation en
    therapie
PATENT ASSIGNEE:
  Alligator Bioscience AB (publ), (4453561), Scheelevagen 19a, 223 70 Lund,
    (SE), (Applicant designated States: all)
```

Van Strijp, Johannes, Antonius, Geradus, Singel 37, 3984 NV Odijk, (NL) De Haas, Carla, Camminghalaan 12, 3981 GH Bunnik, (NL)

Kemmink, Johan, P.O. Box 80082, 3508 TB Utrecht, (NL)

Van Kessel, Kok, Kampweg 17, 3981 EX Bunnik, (NL)

Searcher Shears :

Van Kessel, Kok, Kampweg 17, 3981 EX Bunnik, (NL) LEGAL REPRESENTATIVE:

Thomas, Philip John Duval et al (76811), Eric Potter Clarkson, Park View House, 58 The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 1586583 A2 051019 (Basic)

APPLICATION (CC, No, Date): EP 2004076120 040416;

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; HR; LT; LV; MK

INTERNATIONAL PATENT CLASS: C07K-014/31; A61K-038/16; G01N-033/566

#### ABSTRACT EP 1586583 A2

The present invention relates to compounds that are able to prevent intramolecular contact of the N-terminal residues 10 to 18 of human C5aR with the extracellular loops thereof. More specifically the invention relates to compounds that are able to bind the aspartates in positions 10, 15 and 18 and the glycine in position 12 of the human C5aR. Such compounds are preferably of the general formula Xn))-E-X39))-K-X7))-Y-V-X11))-Y-Xm)), wherein Xn)), X39)), X7)), X11)) and Xm)) are stretches of amino acids and the other letters represent the corresponding amino acids or non-proteinogenic analogs thereof. The invention further relates to their use in prophylaxis and therapy.

ABSTRACT WORD COUNT: 104

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication, Procedural, Application): English; English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200542 1875
SPEC A (English) 200542 9283
Total word count - document A 11158
Total word count - document B 0
Total word count - documents A + B 11158

13/3,AB/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.

## 01949240

Globular assembly of amyloid beta protein and uses thereof Globularer Aufbau vom Amyloid-beta- protein und deren Verwendungen Assemblage de proteine amyloide beta globulaire et ses utilisations PATENT ASSIGNEE:

THE UNIVERSITY OF SOUTHERN CALIFORNIA, (446674), University Park Los Angeles, California 90089, (US), (Applicant designated States: all) Northwestern University, (204952), 633 Clark Street Evanston, Illinois 60208, (US), (Applicant designated States: all) INVENTOR:

Kraft, Grant A., 1309 Evergreen Court, Glenview, IL 60025, (US) Klein, William L., 1145 Chatfield Road, Winnetka, IL 60093, (US) Chromy, Brett A., 2004 Colfax Street, Evanston, IL 60201, (US) Lambert, Mary P., 1956 Linneman Street, Glenview, IL 60025, (US) Finch, Caleb E., 2144 Crescent Drive, Altadena, CA 91101, (US) Morgan, Todd, 312 Fifteenth Place, Manhattan Beach, CA 90266, (US) Wals, Pat, 11412 Pepper Lane, Nevada City, CA 90059-9686, (US) Rozovsky, Irina, 2437 San Pasqual Street, Pasadena, CA 91107, (US) Barlow, Ann, 2525 Noyes Street, Evanston, IL 60201, (US)

LEGAL REPRESENTATIVE:

Brown, John D. (28811), FORRESTER & BOEHMERT Pettenkoferstrasse 20-22, 80336 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1571158 A2 050907 (Basic)

APPLICATION (CC, No, Date): EP 2004027742 000804;

PRIORITY (CC, No, Date): US 369236 990804

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

RELATED PARENT NUMBER(S) - PN (AN):

EP 1200470 (EP 2000952571)

INTERNATIONAL PATENT CLASS: C07K-014/47; A61K-038/04; G01N-033/68

#### ABSTRACT EP 1571158 A2

The invention provides amyloid beta-derived dementing ligands (ADDLs) that comprise amyloid (beta) protein assembly bled into globular non-fibrillar oligomeric structures capable of activating specific cellular processes. The invention provides methods for assaying the formation, presence, receptor protein binding and cellular activity of ADDLs, as well as compounds that block the formation or activity of ADDLs, and methods of identifying such compounds. The invention further provides methods of using ADDLs, and modulating ADDL formation and/or activity, inter alia in the treatment of learning and/or memory disorders.

ABSTRACT WORD COUNT: 86

NOTE:

Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

CLAIMS A (English) 200536 453 SPEC A (English) 200536 24150

Total word count - document A 24603

Total word count - document B 0

Total word count - documents A + B 24603

13/3,AB/3 (Item 3 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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#### 01856099

Antisense modulation of BCL-X expression

Antisense Modulation der BCL-X Expression

Modulation antisens de l'expression du gene BCL-X

PATENT ASSIGNEE:

ISIS PHARMACEUTICALS, INC., (1382621), 2292 Faraday Avenue, Carlsbad, CA 92008, (US), (Applicant designated States: all)

INVENTOR:

Nickoloff, Brian J., 4 Turnberry Court, Burr Ridge, IL 60521-8396, (US) Monia, Brett P., 2306 Casa Hermosa Court, Encinitas, CA 92024, (US) Dean, Nicholas M., 2110 Whisperwind Lane, Olivenhain, CA 92024, (US) Bennett, C. Frank, 1347 Cassins Street, Carlsbad, CA 92009, (US) Zhang, QingQing, 5370 Ruette De Mer, San Diego, CA 92130, (US)

LEGAL REPRESENTATIVE:

Hallybone, Huw George et al (53032), Carpmaels and Ransford, 43-45
Bloomsbury Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 1507005 A2 050216 (Basic)

EP 1507005 A3 050615

APPLICATION (CC, No, Date): EP 2004077688 990928;

PRIORITY (CC, No, Date): US 167921 981007; US 277020 990326; US 323743 990602

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 1119579 (EP 99949943)

INTERNATIONAL PATENT CLASS: C12N-015/11; C07H-021/04; C07H-021/02; A61K-048/00; C12N-015/85; C12N-015/86

# ABSTRACT EP 1507005 A2

Compositions and methods are provided for modulating the expression of bcl-x. Antisense compounds, particularly antisense oligonucleotides, targeted to nucleic acids encoding bcl-x are preferred. Methods of using these compounds for modulation of bcl-x expression and for treatment of diseases associated with expression of bcl-x are also provided. Methods of sensitizing cells to apoptotic stimuli are also provided.

ABSTRACT WORD COUNT: 58

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200507 1492
SPEC A (English) 200507 18182
Total word count - document A 19674

Total word count - document B 0

Total word count - documents A + B 19674

13/3,AB/4 (Item 4 from file: 348) DIALOG(R)File 348:EUROPEAN PATENTS

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#### 01843065

Preparation of fully human antibodies

Methoden zur Herstellung ganzlich humaner Antikorper.

Methodes pour la preparation des anticorps entierement humains PATENT ASSIGNEE:

CCL Holdings Co., Ltd., (4931710), 8F, 163, Section 1 Ji-Long Road, Taipei, (TW), (Applicant designated States: all)
INVENTOR:

Chin, Li-Te, 9F-5, No.12, Lane 175, Wu-Ling Road, Hsin-Chu 300, (TW) LEGAL REPRESENTATIVE:

VOSSIUS & PARTNER (100314), Siebertstrasse 4, 81675 Munchen, (DE) PATENT (CC, No, Kind, Date): EP 1498426 Al 050119 (Basic)

APPLICATION (CC, No, Date): EP 2004016838 040716;

PRIORITY (CC, No, Date): US 622003 030716

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; HR; LT; LV; MK

INTERNATIONAL PATENT CLASS: C07K-016/00; C12N-005/00; C07K-016/10

## ABSTRACT EP 1498426 A1

The present invention provides a method of preparing fully human antibodies that recognize a pre-determined antigen without relying on human donors that have already been exposed to the antigen. To this end, lymphocytes from naive human donors are immunized in vitro with the antigen of interest, and cells that produce antibodies against the

antigen are identified. Since the lymphocytes are immunized in vitro rather than in vivo, it is possible to control which antigen, or which part of the antigen, would be recognized by the antibody. A preferred antigen is gp120 of HIV, particularly the co-receptor binding region of gp120.

ABSTRACT WORD COUNT: 101

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200503 882
SPEC A (English) 200503 8412
Total word count - document A 9294
Total word count - document B 0
Total word count - documents A + B 9294

13/3,AB/5 (Item 5 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

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#### 01801253

Affinity proteins for controlled application of cosmetic substances Proteine mit hoher Affinitat fur kosmetische Substanzen mit gesteuerter Anwendung

Proteines a forte affinite pour des actives cosmetiques pour une application controlee

PATENT ASSIGNEE:

L-MAbs B.V., (4297560), Agro Business Park 40, 6708 PW Wageningen, (NL), (Applicant designated States: all)

INVENTOR:

Houtzager, Erwin, Koenestraat 13, 3958 XD Amerongen, (NL) Vijn, Irma Maria Caecilia, Haldwerweg 105, 6721 ZJ Bennekom, (NL) Sijmons, Peter Christiaan, Valeriusstraat 210-3, 1075 GK Amsterdam, (NL) Mudge, Grant, 196 Lonetown Road, West Redding, Connecticut 06496, (US) Fadel, Addi, 135 Long Hill Road, Shelton, Connecticut 06484, (US) Valinotti, Tony, 4 Lester Road, Sandy Hook, Connecticut 06482, (US) LEGAL REPRESENTATIVE:

Prins, Adrianus Willem, Mr. Ir. et al (20903), Vereenigde, Nieuwe Parklaan 97, 2587 BN Den Haag, (NL)

PATENT (CC, No, Kind, Date): EP 1470824 A1 041027 (Basic)

APPLICATION (CC, No, Date): EP 2002080206 021210;

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO

INTERNATIONAL PATENT CLASS: A61K-047/48; C07K-016/18

# ABSTRACT EP 1470824 A1

Provided are means and methods for applying cosmetic substance to a desired target. The method comprising providing a conjugate of a proteinaceous substance having a specific affinity for said target molecule linked to a cosmetic substance, whereby the resulting connection between cosmetic substance and target molecule can be disrupted upon the presence of a chemical and/or physical signal.

ABSTRACT WORD COUNT: 59

NOTE:

Figure number on first page: NONE

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LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS A (English)
                           200444
                                       919
                (English) 200444
                                     31252
      SPEC A
Total word count - document A
                                     32171
Total word count - document B
Total word count - documents A + B
                                     32171
 13/3,AB/6
               (Item 6 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01779146
ADP-ribosyltransferase c3cer
ADP-Ribosyltransferase c3cer
ADP-ribosyltransferase c3cer
PATENT ASSIGNEE:
  Migragen AG, (4151551), Spemannstrasse 34, 72076 Tubingen, (DE),
    (Applicant designated States: all)
INVENTOR:
  Aktories, Klaus, Prof. Dr., Ezmattenweg 22, 79189 Bad Krozingen, (DE)
  Wilde, Christian, Dr., Kandelstrasse 44, 79106 Freiburg, (DE)
LEGAL REPRESENTATIVE:
  Bosl, Raphael, Dr. rer. nat., Dipl.-Chem. (74947), Patentanwalte Isenbruck
    Bosl Horschler Wichmann Huhn Prinzregentenstrasse 68, 81675 Munchen,
    (DE)
PATENT (CC, No, Kind, Date): EP 1452589 A1 040901 (Basic)
                              EP 1452589 A1 040901
APPLICATION (CC, No, Date):
                              EP 2003004346 030228;
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
  HU; IE; IT; LI; LU; MC; NL; PT; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO
INTERNATIONAL PATENT CLASS: C12N-009/10; C12N-015/62; C12N-015/54;
  C12N-005/10; A61K-038/45; C07K-014/21
ABSTRACT EP 1452589 A1
    The present invention relates to the ADP-Ribosyltransferase C3cer and
  its use for the preparation of a pharmaceutical composition for the
  regeneration of neurons and/or the stimulation of the growth of neurons.
ABSTRACT WORD COUNT: 32
NOTE:
  Figure number on first page: NONE
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS A (English) 200436
                                       770
                (English) 200436
                                      6930
      SPEC A
                                      7700
Total word count - document A
Total word count - document B
                                         n
Total word count - documents A + B
                                      7700
 13/3,AB/7
               (Item 7 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
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01674389
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Transgenic and cloned mammals

Transgen- und klonierte Saugentiere

Mammiferes trangeniques et clones

PATENT ASSIGNEE:

GTC Biotherapeutics, Inc., (4312522), 175 Crossing Boulevard,, Framingham, MA 01702, (US), (Applicant designated States: all) INVENTOR:

Echelard, Yann, 248 Moss Hill Road, Jamaica Plains, MA 02131, (US) LEGAL REPRESENTATIVE:

Ruffles, Graham Keith (43043), Marks & Clerk, 66-68 Hills Road, Cambridge, Cambridgeshire CB2 1LA, (GB)

PATENT (CC, No, Kind, Date): EP 1375654 A2 040102 (Basic)

APPLICATION (CC, No, Date): EP 2003014030 991102;

PRIORITY (CC, No, Date): US 106728 981102; US 298508 990422; US 298971 990423; US 131328 990426

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 1127113 (EP 99971451)

INTERNATIONAL PATENT CLASS: C12N-015/00; A01K-067/027; C07K-014/81

#### ABSTRACT EP 1375654 A2

The invention features methods of making cloned and transgenic non-human mammals, for instance goats. The methods include making a somatic cell line, for instance a transgenic somatic cell line, which can be used as a donor cell, methods of producing a cloned or transgenic non-human mammal by introducing the genome of a somatic cell into an enucleated oocyte, preferably a naturally matured oocyte in the metaphase II stage of meiotic cell division, to form a reconstructed embryo, and methods of transferring the reconstructed embryo. The invention also includes cell lines, reconstructed embryos and cloned or transgenic non-human mammals.

ABSTRACT WORD COUNT: 99

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

CLAIMS A (English) 200401 635

SPEC A (English) 200401 25452

Total word count - document A 26087

Total word count - document B

Total word count - documents A + B 26087

13/3,AB/8 (Item 8 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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# 01663911

Genetically engineered vaccine strain

Gentechnologisch hergestellter Stamm fur Impfstoffe

Souche de vaccin mise au point par genie genetique

PATENT ASSIGNEE:

Connaught Technology Corporation, (4514650), 3711 Kennett Pike, Suite 200, Greenville, DE 19807, (US), (Applicant designated States: all)
INVENTOR:

Paoletti, Enzo, 297 Murray Avenue, Delmar, NY 12054, (US)

Perkus, Marion E., Box 276A, RD No. 2, 4971 Western Turnpike, Altamont, NY 12009, (US) Taylor, Jill, 22 Rose Court, Albany, NY 12209, (US) Tartaglia, James, 7 Christina Drive, Schenectady, NY 12303, (US) Norton, Elizabeth K., 14 Surrey Hill Drive, Latham, NY 12110, (US) Riviere, Michel, 11 Chemin du Chancellier, 69130 Ecully, (FR) De Taisne, Charles, 410 Manning Boulevard, Albany, NY 12206, (US) Limbach, Keith J., 12353 Morning Light Terrace, Gaitherburg, MD 20878, Johnson, Gerard P., 100 Devitt Road, Waterford, NY 12188, (US) Pincus, Steven E., 78 Troy Road, East Greenbush, NY 12061, (US) Cox, William I., 1 Washington Place, Troy, NY 12180, (US) Audonnet, Jean-Christophe Francis, 596 Warren Street No. 6, Albany, NY 12201, (US) Gettig, Russell Gilbert, R.D. 2, Box 421 C, Averill Park, NY 12018, (US) LEGAL REPRESENTATIVE: Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB) PATENT (CC, No, Kind, Date): EP 1367128 A1 031203 (Basic) EP 2003018214 920309; APPLICATION (CC, No, Date): PRIORITY (CC, No, Date): US 666056 910307; US 713967 910611; US 847951 DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; MC; NL; RELATED PARENT NUMBER(S) - PN (AN): EP 575491 (EP 92908110) INTERNATIONAL PATENT CLASS: C12N-015/863; C12N-007/00; C12N-015/00; C12P-021/06; A61K-039/12 ABSTRACT EP 1367128 A1 What is described is a modified vector, such as a recombinant poxvirus, particularly recombinant vaccina virus, having enhanced safety. The modified recombinant virus has nonessential virus-encoded genetic functions inactivated therein so that virus has attenuated virulance. In one embodiment, the genetic functions are inactivated by deleting an open reading frame encoding a virulence factor. In another embodiment, the genetic functions are inactivated by insertional inactivation of an open reading frame encoding a virulence factor. What is also described is a vaccine containing the modified recombinant virus having nonessential virus-encoded genetic functions inactivated therein so that the vaccine has an increased level of safety compared to known recombinant virus vaccines. ABSTRACT WORD COUNT: 110 Figure number on first page: NONE LANGUAGE (Publication, Procedural, Application): English; English FULLTEXT AVAILABILITY: Word Count Available Text Language Update CLAIMS A (English) 200349 738 (English) 200349 103084 SPEC A Total word count - document A 103822 Total word count - document B Total word count - documents A + B 103822 13/3,AB/9 (Item 9 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS

Searcher : Shears 571-272-2528

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01616603
Therapeutic use of non-neurotoxic clostridium botulinum toxin
     type C2
                                 des
                                        nicht-neurotoxischen
                                                                Clostridium
Therapeutische
                  Verwendung
    Botulinum Toxins Typ C2
Utilisation therapeutique de non-neurotoxic botulinum clostridium
    toxine type C2
PATENT ASSIGNEE:
  Botulinum Toxin Research Associates, Inc., (4042650), 1261
    Furnace Brook Parkway, Quincy, Massachusetts 02169, (US), (Applicant
    designated States: all
INVENTOR:
  Borodic, Gary E., 90 Kensington Drive, Canton, Massachusetts 02021, (US)
LEGAL REPRESENTATIVE:
  Gardner, Rebecca (90041), Frank B. Dehn & Co. 179 Queen Victoria Street,
    London EC4V 4EL, (GB)
PATENT (CC, No, Kind, Date): EP 1334729 A1 030813 (Basic)
APPLICATION (CC, No, Date): EP 2002250834 020207;
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: A61K-038/45; C12N-009/10; A61P-037/00;
  A61P-027/00; A61P-021/00
ABSTRACT EP 1334729 A1
    The invention relates to clostridial toxin compositions and their use
  for the treatment of diseases, particularly diseases which are associated
  with pain, inflammation and irritation, as well as movement disorders. In
  particular, the invention provides a botulinum toxin
  which substantially lacks neurotoxic activity, or a biologically active
  component thereof which substantially lacks neurotoxic activity, for use
  in therapy.
ABSTRACT WORD COUNT: 59
NOTE:
  Figure number on first page: 2
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
                                     Word Count
Available Text Language
                           Update
      CLAIMS A (English) 200333
                                       713
               (English) 200333
                                      6857
      SPEC A
Total word count - document A
                                      7570
Total word count - document B
                                         0
Total word count - documents A + B
                                      7570
                (Item 10 from file: 348)
 13/3,AB/10
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
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01586625

TAILOR-MADE MULTIFUNCTIONAL STEM CELLS AND UTILIZATION THEREOF
GEZIELT HERGESTELLTE MULTIFUNKTIONELLE STAMMZELLEN UND IHRE VERWENDUNG
CELLULES SOUCHES MULTIFONCTIONNELLES ADAPTEES ET UTILISATION DE CES
DERNIERES

PATENT ASSIGNEE:

ReproCELL Inc., (4629280), The Imperial Tower Hotel 12F, 1-1-1 Uchisaiwaicho, Chiyoda-ku, Tokyo 100-0011, (JP), (Applicant designated

Nakatsuji, Norio, (4399760), 273-7, Iwakuranishigawaracho, Sakyo-ku, Kyoto-shi, Kyoto 606-0014, (JP), (Applicant designated States: all) Tada, Takashi, (4399780), 49-10, Yoshidashimoojicho, Sakyo-ku, Kyoto-shi, Kyoto 606-8314, (JP), (Applicant designated States: all) INVENTOR: NAKATSUJI, Norio, 273-7, Iwakuranishigawaracho, Sakyo-ku, Kyoto-shi, Kyoto 606-0014, (JP) TADA, Takashi, 49-10, Yoshidashimoojicho, Sakyo-ku, Kyoto-shi, Kyoto 606-8314, (JP) TADA, Masako, 49-10, Yoshidashimoojicho, Sakyo-ku, Kyoto-shi, Kyoto 606-8314, (JP) LEGAL REPRESENTATIVE: Holliday, Louise Caroline (95451), D Young & Co, 21 New Fetter Lane, London EC4A 1DA, (GB) PATENT (CC, No, Kind, Date): EP 1437404 Al 040714 (Basic) WO 2003027278 030403 EP 2002799492 020920; WO 2002JP9732 020920 APPLICATION (CC, No, Date): PRIORITY (CC, No, Date): JP 2001290005 010921 DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; SK; TR EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI INTERNATIONAL PATENT CLASS: C12N-015/02; C12N-005/06; C12N-009/10; C12Q-001/02; A61L-027/38; A61K-045/00; A61K-048/00 ABSTRACT EP 1437404 A1 An object of the present invention is to efficiently establish cells, tissues, and organs capable of serving as donors for treating diseases, without eliciting immune rejection reactions, without starting with an egg cell. This object was achieved by providing a pluripotent stem cell having a desired genome. The cell was produced by treating with a reprogramming agent, producing a fusion cell of an MHC deficient stem cell with a somatic cell, or after producing a fusion cell of a stem cell with a somatic cell, removing a gene derived from the stem cell by performing genetic manipulation with a retrovirus. ABSTRACT WORD COUNT: 101 NOTE: Figure number on first page: NONE LANGUAGE (Publication, Procedural, Application): English; English; Japanese FULLTEXT AVAILABILITY: Update Word Count Available Text Language CLAIMS A (English) 200429 1269 SPEC A (English) 200429 30554 Total word count - document A 31823 Total word count - document B Total word count - documents A + B 31823 (Item 11 from file: 348) 13/3,AB/11 DIALOG(R) File 348: EUROPEAN PATENTS (c) 2005 European Patent Office. All rts. reserv. 01468215 CELL PROLIFERATION INHIBITORS COMPRISING ETS TRANSCRIPTION FACTOR OR GENE ENCODING THE SAME ZELLPROLIFERATIONSHEMMER. TIM ETS-TRANSKRIPTIONSFAKTOR ODER DAFUR KODIERENDES GEN INHIBITEURS DE LA PROLIFERATION CELLULAIRE COMPRENANT UN FACTEUR DE

TRANSCRIPTION ETS OU UN GENE CODANT CE DERNIER PATENT ASSIGNEE:

HISAMITSU PHARMACEUTICAL CO. INC., (444623), 408, Tashirodaikanmachi, Tosu-shi, Saga-ken 841-0017, (JP), (Applicant designated States: all) INVENTOR:

KAI, Hirofumi, 3-10-30, Kokubu, Kumamoto-shi, Kumamoto 862-0949, (JP) HISATSUNE, Akinori, c/o HISAMITSU PHARMA. CO. INC., 25-11, Kannondai 1-chome, Tsukuba-shi, Ibaraki 305-0856, (JP)

LEGAL REPRESENTATIVE:

Cresswell, Thomas Anthony et al (50351), J.A. KEMP & CO. 14 South Square Gray's Inn, London WClR 5JJ, (GB)

PATENT (CC, No, Kind, Date): EP 1366773 A1 031203 (Basic) EP 1366773 A8 050727

WO 2002064165 020822

APPLICATION (CC, No, Date): EP 2002712308 020213; WO 2002JP1180 020213 PRIORITY (CC, No, Date): JP 200134834 010213

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: A61K-045/00; A61K-038/17; A61K-031/711;
A61K-048/00; A61P-043/00; A61P-035/00; A61P-029/00; G01N-033/15;
G01N-033/50

## ABSTRACT EP 1366773 A1

It is found out that an ETS transcription factor (more specifically, an ETS transcription factor MEF) has a potent effect of inhibiting cell proliferation and an effect of inhibiting MMP production. Based on this finding, novel cell proliferation inhibitors (more specifically, novel remedies for tumor and novel antirheumatics) with the use of the ETS transcription factor MEF or a gene encoding the same are provided.

Namely, cell proliferation inhibitors comprising an ETS transcription factor or gene encoding the same or a substance controlling the effect of the ETS transcription factor or the gene encoding the same. Also, matrix metalloprotease (MMP) (more specifically, MMP-9) production inhibitors or IL-8 production inhibitors comprising the ETS transcription factor or gene encoding the same or a substance controlling the effect of the ETS transcription factor or the gene encoding the same are provided.

ABSTRACT WORD COUNT: 139 NOTE:

Figure number on first page: 10

LANGUAGE (Publication, Procedural, Application): English; English; Japanese FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200349 671
SPEC A (English) 200349 14067
Total word count - document A 14738
Total word count - document B 0
Total word count - documents A + B 14738

13/3,AB/12 (Item 12 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.

01421490
METHOD OF AMPLIFYING NUCLEIC ACID
VERFAHREN ZUR VERVIELFALTIGUNG VON NUKLEINSAUREN
PROCEDE D'AMPLIFICATION D'ACIDE NUCLEIQUE

```
PATENT ASSIGNEE:
  TAKARA BIO INC., (4118471), 4-1, Seta 3-chome, Otsu-shi, Shiga 520-2193,
    (JP), (Applicant designated States: all)
INVENTOR:
  SAGAWA, Hiroaki, 6-32, Nishishibukawa 2-chome, Kusatsu-shi, Shiga
    525-0025, (JP)
  UEMORI, Takashi, 709, Sharumankopo-daini-seta, 1-16, Oe 3-chome,
    Otsu-shi, Shiga 520-2141, (JP)
  MUKAI, Hiroyuki, 1461-82, Aza Minamikawa, Mizuho-cho, Moriyama-shi, Shiga
    524-0102, (JP)
  YAMAMOTO, Junko, 332-2, Furutaka-cho, Moriyama-shi, Shiga 524-0044, (JP)
  TOMONO, Jun;, 313, Hamoparesu-Kusatsu, 2-12-1, Nishishibukawa,
    Kusatsu-shi, Shiga 525-0025, (JP)
  KOBAYASHI, Eiji, 18-19, Ichiriyama 6-chome, Otsu-shi, Shiga 520-2153,
    (JP)
  ENOKI, Tatsuji, 202, Inouehausu, 10-23, Nango 1-chome, Otsu-shi, Shiga
    520-0865, (JP)
  ASADA, Kiyozo, 3-20-9, Kibogaoka, Konan-cho, Koka-gun, Shiga 520-3333,
  KATO, Ikunoshin, 1-1-150, Nanryo-cho, Uji-shi, Kyoto 611-0028, (JP)
LEGAL REPRESENTATIVE:
  Grund, Martin, Dr. et al (90762), Dr. Volker Vossius Patentanwaltskanzlei
    Geibelstrasse 6, 81679 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1312682 A1 030521 (Basic)
                              WO 2002016639 020228
APPLICATION (CC, No, Date):
                              EP 2001956988 010821; WO 2001JP7139 010821
PRIORITY (CC, No, Date): JP 2000251981 000823; JP 2000284419 000919; JP
    2000288750 000922; JP 2001104191 010403
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C12Q-001/68; C12N-015/09
ABSTRACT EP 1312682 A1
```

A method of highly sensitively and specifically amplifying a target nucleic acid in a sample by using a chimeric oligonucleotide primer having a ribonucleotide provided at the 3'-terminus or in the 3'-terminal side, an endoribonuclease and a DNA polymerase having a chain transfer activity, i.e., an isothermal and chimeric primer-initiated amplification of nucleic acids (ICAN) method; a method of detecting an amplified fragment obtained by using the above method; a process for producing a target nucleic acid by using the above amplification method; and chimeric oligonucleotide primers to be used in these methods.

ABSTRACT WORD COUNT: 94 NOTE:

Figure number on first page: 0035

LANGUAGE (Publication, Procedural, Application): English; English; Japanese FULLTEXT AVAILABILITY:

Word Count Available Text Language Update CLAIMS A (English) 200321 5981 SPEC A (English) 200321 57025 Total word count - document A 63006 Total word count - document B Total word count - documents A + B 63006

13/3,AB/13 (Item 13 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS

> : Shears 571-272-2528 Searcher

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#### 01394688

PROCESS FOR PRODUCING PLANT-ORIGIN ANTIBACTERIAL SUBSTANCE

VERFAHREN ZUR HERSTELLUNG EINER AUS PFLANZEN STAMMENDEN, ANTIBAKTERIELLEN SUBSTANZ

PROCEDE DE PRODUCTION D'UNE SUBSTANCE ANTIBACTERIENNE D'ORIGINE VEGETALE PATENT ASSIGNEE:

SAKAI, Takuo, (315581), 4-13-6, Harayamadai, Sakai-shi Osaka 590-0132, (JP), (Proprietor designated states: all)
INVENTOR:

SAKAI, Takuo, 4-13-6, Harayamadai, Sakai-shi Osaka 590-0132, (JP) LEGAL REPRESENTATIVE:

Doireau, Marc (44325), Cabinet ORES, 36, rue de St Petersbourg, 75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 1209238 A1 020529 (Basic) EP 1209238 B1 051019 WO 2001098519 011227

APPLICATION (CC, No, Date): EP 2001936956 010611; WO 2001JP4929 010611 PRIORITY (CC, No, Date): JP 2000189614 000623

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI INTERNATIONAL PATENT CLASS: C12P-001/00; A01N-065/00

#### ABSTRACT EP 1209238 A1

A process for producing an antibacterial substance which comprises disintegrating at least a part of a plant tissue and releasing the antibacterial substance therefrom; and antibacterial or bacteriostatic compositions containing the antibacterial substance thus obtained as the active ingredient. By using the above process and compositions, the proliferation of spore-forming bacteria can be efficiently inhibited.

ABSTRACT WORD COUNT: 56

## NOTE:

Figure number on first page: NONE

LANGUAGE (Publication, Procedural, Application): English; English; Japanese FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200222	227
CLAIMS B	(English)	200542	197
CLAIMS B	(German)	200542	191
CLAIMS B	(French)	200542	218
SPEC A	(English)	200222	2848 .
SPEC B	(English)	200542	2994
Total word coun	t - documen	t A	3076
Total word count - document B			3600
Total word coun	t - documen	ts A + B	6676

13/3,AB/14 (Item 14 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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# 01352431

Matrix protein compositions for inflammatory and infectious conditions Matrixprotein enthaltende Zusammensetzungen für entzundliche und infektiose Zustande

Compositions proteiniques matricielles pour des conditions inflammatoires

```
et infectieuses
PATENT ASSIGNEE:
  Biora Bioex AB, (1401681), Per Albin Hanssons Vag 41, 205 12 Malmo, (SE),
    (Proprietor designated states: all)
INVENTOR:
  Gestrelius, Stina, St. Sgridsgatan 5, 223 50 Lund, (SE)
  Hammarstrom, Lars, Frejavagen 28, 182 64 Djursholm, (SE)
  Lyngstadaas, Staele Peter, Haakons vei 5, 1450 Nesoddtangen, (NO)
  Andersson, Christer, Vellinge 27:12, 235 91 Vellinge, (SE)
  Slaby, Ivan, Ingenjorsgatan, 03,, 215 68 - Malmo, (SE)
  Hammargren, Tomas, Sanekullavagen 18, 217 74 Malmo, (SE)
LEGAL REPRESENTATIVE:
  Dahner, Christer et al (87303), Strom & Gulliksson IP AB, Box 7086, 103
    87 Stockholm, (SE)
PATENT (CC, No, Kind, Date): EP 1153610 A1 011114 (Basic)
                              EP 1153610 B1 030820
                              EP 2001201915 990226;
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): DK 98270 980227; US 81551 P 980413; DK 981328
    981016
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
RELATED PARENT NUMBER(S) - PN (AN):
  EP 1059934 (EP 99903852)
INTERNATIONAL PATENT CLASS: A61K-038/39; A61P-031/00; A61P-029/00
ABSTRACT EP 1153610 A1
    Active enamel substances may be used for the preparation of a
  pharmaceutical or cosmetic composition for healing of a wound, improving
  healing of a wound, soft tissue regeneration or repair, or for preventing
  or treating infection or inflammation.
ABSTRACT WORD COUNT: 39
NOTE:
  Figure number on first page: NONE
LANGUAGE (Publication, Procedural, Application): English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                    Word Count
      CLAIMS A (English) 200146
                                     233
      CLAIMS B (English) 200334
                                      233
      CLAIMS B
                          200334
                                      214
               (German)
               (French) 200334
                                      249
      CLAIMS B
      SPEC A
                (English) 200146
                                     19381
      SPEC B
               (English) 200334
                                     18864
Total word count - document A
                                     19617
Total word count - document B
                                     19560
Total word count - documents A + B
                                    39177
13/3,AB/15
                (Item 15 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01324561
Mammalian osteoregulins
Saugetier Osteoreguline
Osteoregulines mammiferes
PATENT ASSIGNEE:
  Pfizer Products Inc., (2434221), Eastern Point Road, Groton, Connecticut
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06340, (US), (Applicant designated States: all)
INVENTOR:
  Brown, Thomas Aquinas, Pfizer Global Res. and Dev., Eastern Point Road,
    Groton, Connecticut 06340, (US)
  De Wet, Jeffrey Roux, Pfizer Global Res. and Dev., Eastern Point Road,
    Groton, Connecticut 06340, (US)
  Gowen, Lori Christine, 310 East 66th Street, Apartment 4D, New York 10021
    , (US)
  Hames, Lynn Marie, Pfizer Global Res. and Dev., Eastern Point Road,
    Groton, Connecticut 06340, (US)
LEGAL REPRESENTATIVE:
  Hayles, James Richard et al (75142), Pfizer Limited, Patents Department,
    Ramsgate Road, Sandwich Kent CT13 9NJ, (GB)
PATENT (CC, No, Kind, Date): EP 1130098 A2 010905 (Basic)
                              EP 1130098 A3 030910
                              EP 2001301768 010227;
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 185617 P 000229; US 234500 P 000922
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C12N-015/12; C07K-014/47; A01K-067/027;
  C12Q-001/68; G01N-033/68
ABSTRACT EP 1130098 A2
     The invention features novel osteoregulin polypeptides, nucleic acid
  sequences which encode the polypeptides, vectors, antibodies, hosts which
  express heterologous osteoregulins, and animal cells and mammals with a
  targeted disruption of an osteoregulin gene. These osteoregulins play a
  role in regulating bone homeostasis, adiposity, and the calcification of
  atherosclerotic plaques. Accordingly, the invention also features
  screening assays to identify modulators of osteoregulin activity as well
  as methods of treating mammals for diseases or disorders associated with
  osteoregulin activity.
ABSTRACT WORD COUNT: 79
NOTE:
  Figure number on first page: NONE
LANGUAGE (Publication, Procedural, Application): English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS A (English)
                          200136
                                       898
                (English) 200136
                                     28794
      SPEC A
Total word count - document A
                                     29692
Total word count - document B
Total word count - documents A + B
                                     29692
                (Item 16 from file: 348)
 13/3,AB/16
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01266016
GLOBULAR ASSEMBLY OF AMYLOID BETA PROTEIN AND USES THEREOF
GLOBULARER AUFBAU VOM AMYLOID-BETA- PROTEIN UND DEREN VERWENDUNGEN
ASSEMBLAGE DE PROTEINE AMYLOIDE B GLOBULAIRE ET SES UTILISATIONS
PATENT ASSIGNEE:
  THE UNIVERSITY OF SOUTHERN CALIFORNIA, (446674), University Park, Los
    Angeles, California 90089, (US), (Proprietor designated states: all)
  NORTHWESTERN UNIVERSITY, (204952), 633 Clark Street, Evanston Illinois
    60208, (US), (Proprietor designated states: all)
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INVENTOR:
  KRAFFT, Grant, A., 1309 Evergreen Court, Glenview, IL 60025, (US)
  KLEIN, William, L., 1145 Chatfield Road, Winnetka, IL 60093, (US)
  CHROMY, Brett, A., 2004 Colfax Street, Evanston, IL 60201, (US)
  LAMBERT, Mary, P., 1956 Linneman Street, Glenview, IL 60025, (US)
  FINCH, Caleb, E., 2144 Crescent Drive, Altadena, CA 91101, (US)
  MORGAN, Todd, 312 Fifteenth Place, Manhattan Beach, CA 90266, (US)
  WALS, Pat, 924 Elyria Drive, Los Angeles, Ca 90065, (US)
  ROZOVSKY, Irina, 2437 San Pasqual Street, Pasadena, CA 91107, (US)
  BARLOW, Ann, 2525 Noyes Street, Evanston, IL 60201, (US)
LEGAL REPRESENTATIVE:
  Brown, John David (28811), FORRESTER & BOEHMERT Pettenkoferstrasse 20-22,
    80336 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1200470 A2 020502 (Basic)
                              EP 1200470 B1 041124
                              WO 2001010900 010215
                              EP 2000952571 000804; WO 2000US21458 000804
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 369236 990804
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
RELATED DIVISIONAL NUMBER(S) - PN (AN):
     (EP 2004027742)
INTERNATIONAL PATENT CLASS: C07K-014/47; G01N-033/68; A61K-038/04
NOTE:
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English
FULLTEXT AVAILABILITY:
                           Update
                                     Word Count
Available Text Language
                           200448
                                      2233
      CLAIMS B
               (English)
                           200448
                                      2174
      CLAIMS B
                 (German)
      CLAIMS B
                 (French)
                           200448
                                      2474
      SPEC B
                (English)
                           200448
                                     21046
Total word count - document A
Total word count - document B
                                     27927
Total word count - documents A + B
                                     27927
 13/3,AB/17
                (Item 17 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01196162
Vaccine and antitoxin for treatment and prevention of C. difficile disease
Impfstoff und Antitoxine zur Behandlung und Vorbeugung von C. Difficile
    Krankheiten
Vaccin et antitoxines pour le traitement et la prevention de maladies
    causees par C. difficile
PATENT ASSIGNEE:
  OPHIDIAN PHARMACEUTICALS, INC., (1819051), 5445 East Cheryl Parkway,
    Madison, WI 53711, (US), (Applicant designated States: all)
INVENTOR:
  Williams, James A., 6420 Pueblo Court, Lincoln, NE 68516, (US)
  Padhye, Nisha V., 4535 Birchhollow Drive, Lincoln, NE 68516, (US)
  Thalley, Bruce S., 925 High Street. no. 2, Madison, WI 53719, (US)
  Stafford, Douglas C., 5743 Timer View Court, Madison, WI 53711, (US)
  Firca, Joseph R., 123 Deerpath Drive, Vernon Hills, IL 60061, (US)
  Kink, John A., 110 Wolf Street, Madison, WI 53717, (US)
LEGAL REPRESENTATIVE:
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Glawe, Delfs, Moll & Partner (100691), Patentanwalte Rothenbaumchaussee 58, 20148 Hamburg, (DE) PATENT (CC, No, Kind, Date): EP 1041149 A2 001004 (Basic) EP 1041149 A3 010502 EP 105371 951023; APPLICATION (CC, No, Date): PRIORITY (CC, No, Date): US 329154 941024; US 405496 950316; US 422711 950414; US 480604 950607 DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE EXTENDED DESIGNATED STATES: LT; LV; SI RELATED PARENT NUMBER(S) - PN (AN): EP 796326 (EP 95937626) INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-001/21; C07K-014/33; C07K-016/12; C07K-001/22; A61K-038/16; A61K-039/08; C12R-1:145 ABSTRACT EP 1041149 A2 The present invention provides neutralizing antitoxin directed against C.difficile toxins. These antitoxins are produced in avian species using soluble recombinant C.difficile toxin proteins. The avian antitoxins are designed so as to be orally administrable in therapeutic amounts and may be in any form (i.e., as a solid or in aqueous solution). Solid forms of the antitoxin may comprise an enteric coating. These antitoxins are useful in the treatment of humans and other animals intoxicated with at least one bacterial toxin. The invention further provides vaccines capable of protecting a vaccinated recipient from the morbidity and mortality associated with C.difficile infection. These vaccines are useful for administration to humans and other animals at risk of exposure to C.difficile toxins. ABSTRACT WORD COUNT: 119 NOTE: Figure number on first page: NONE LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY: Available Text Language Update Word Count CLAIMS A (English) 200040 869 (English) 200040 95603 SPEC A Total word count - document A 96472 Total word count - document B n 96472 Total word count - documents A + B 13/3,AB/18 (Item 18 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS (c) 2005 European Patent Office. All rts. reserv. 01172621 High-throughput screening of gene function using libraries for functional genomics applications Effizientes Verfahren zum Auffinden von Genfunktionen mittels Bibliotheken zur funktionellen Genomanwendung Procede de criblage a fort rendement de la fonction d'un gene en utilisant des bibliotheques pour analyses fonctionelles de genomes PATENT ASSIGNEE: Galapagos Genomics N.V., (3370130), Generaal de Wittelaan 11 A3, 2800 Mechelen, (BE), (Proprietor designated states: all) Schouten, Govert, Da Costastraat 82, 2321 AR Leiden, (NL) Vogels, Ronald, van Rietlaan 4, 3461 HW Linschoten, (NL)

Bout, Abraham, Coymansstraat 24, 2751 AR Moerkapelle, (NL) van Es, Helmuth, Bandholm 89, 2133 DJ Hoofddorp, (NL) LEGAL REPRESENTATIVE:

Prins, Hendrik Willem et al (55081), Arnold & Siedsma, Advocaten en Octrooigemachtigden, Sweelinckplein 1, 2517 GK Den Haag, (NL)

PATENT (CC, No, Kind, Date): EP 1022335 A1 000726 (Basic)

EP 1022335 B1 040331

APPLICATION (CC, No, Date): EP 99201866 990611;

PRIORITY (CC, No, Date): US 97239 980612

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: C12N-015/10; C12N-015/86; C12N-005/10

#### ABSTRACT EP 1022335 A1

Novel means and methods for their use are provided to determine the function of the product(s) of one or more sample nucleic acids. The sample nucleic acids are synthetic oligonucleotides, DNA, or cDNA and encode polypeptides, antisense nucleic acids or GSEs. The sample nucleic acids are expressed in a host by a vehicle to alter at least one phenotype of the host. The altered phenotype(s) is identified as a means to assign a biological function to the product(s) encoded by the sample nucleic acid(s).

ABSTRACT WORD COUNT: 85 NOTE:

Figure number on first page: 36II

LANGUAGE (Publication, Procedural, Application): English; English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count 200030 CLAIMS A (English) 973 CLAIMS B (English) 200414 1273 CLAIMS B (German) 200414 1157 CLAIMS B (French) 200414 1330 SPEC A (English) 200030 37684 SPEC B (English) 200414 38916 Total word count - document A 38664 Total word count - document B 42676 Total word count - documents A + B 81340

13/3,AB/19 (Item 19 from file: 348) DIALOG(R)File 348:EUROPEAN PATENTS

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01149591

STABLE LIQUID FORMULATIONS OF BOTULINUM TOXIN

STABILISIERTE FLUSSIGE ARZNEIZUBEREITUNGEN ENTHALTEND BOTULINUM

TOXIN

FORMULATIONS LIQUIDES STABLES DE LA TOXINE DE BOTULINUM PATENT ASSIGNEE:

Elan Pharmaceuticals, Inc., (2709860), 800 Gateway Boulevard, South San Francisco, CA 94080, (US), (Proprietor designated states: all) INVENTOR:

MOYER, Elizabeth, 435 Marin Avenue, Mill Valley, CA 94941, (US) HIRTZER, Pamela, 291 Scenic Avenue, Piedmont, CA 94611, (US) LEGAL REPRESENTATIVE:

Lee, Nicholas John et al (76842), Kilburn & Strode, 20 Red Lion Street, London WC1R 4PJ, (GB)

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PATENT (CC, No, Kind, Date): EP 1112082 A2
                                             010704 (Basic)
                              EP 1112082 B1 020731
                              WO 200015245 000323
                              EP 99945649 990909; WO 99US20912 990909
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 99870 P 980911
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: A61K-038/16; A61K-047/02; A61K-047/12;
  A61P-021/00
NOTE:
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS B (English) 200231
                                       671
                 (German) 200231
                                       645
      CLAIMS B
      CLAIMS B
                 (French)
                          200231
                                       771
                (English) 200231
      SPEC B
                                      9547
Total word count - document A
Total word count - document B
                                     11634
Total word count - documents A + B
 13/3,AB/20
                (Item 20 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01134551
Anti-Fas Antibodies
Anti-Fas-Antikorper
Anticorps anti-Fas
PATENT ASSIGNEE:
  Sankyo Company Limited, (204886), 5-1, Nihonbashi-Honcho 3-chome,
    Chuo-ku, Tokyo 103-8426, (JP), (Applicant designated States: all)
INVENTOR:
  Serizawa, Nobufasa, c/o Sankyo Co. Ltd., 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140-8710, (JP)
  Haruyama, Hideyuki, c/o Sankyo Co. Ltd., 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140-8710, (JP)
  Nakahara, Kaori, c/o Sankyo Co. Ltd., 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140-8710, (JP)
  Tamaki, Ikuko, c/o Sankyo Co. Ltd., 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140-8710, (JP)
  Takahashi, Tohru, c/o Sankyo Co. Ltd., 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140-8710, (JP)
LEGAL REPRESENTATIVE:
  Gibson, Christian John Robert et al (30951), MARKS & CLERK, 57/60
    Lincoln's Inn Fields, London WC2A 3LS, (GB)
PATENT (CC, No, Kind, Date): EP 990663 A2
                                             000405 (Basic)
                              EP 990663 A3 020417
                              EP 99307711 990929;
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): JP 98276881 980930; JP 98276882 980930
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: C07K-016/28; C12N-015/13; C12N-015/62;
  C12N-015/70; C12N-001/21; A61K-039/395
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ABSTRACT EP 990663 A2
    Anti-Fas antibodies are cross-reactive with mouse and human Fas and are
  useful in the treatment of conditions attributable to abnormalities in
  the Fas/Fas ligand system.
ABSTRACT WORD COUNT: 26
NOTE:
  Figure number on first page: NONE
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS A (English) 200014
                                      1483
      SPEC A
                (English) 200014
                                     58480
Total word count - document A
                                     59963
Total word count - document B
                                         0
Total word count - documents A + B
                                     59963
 13/3,AB/21
                (Item 21 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01036583
METHODS
            OF
                                 COMPOSITIONS
                                                 FOR
                                                        BENZYLIDENE-
                                                                         AND
                   USE
                          AND
    CINNAMYLIDENE-ANABASEINES
BENZYLIDENE- UND CINNAMYLIDENE-ANABASEINE ALS NEURONALE NIKOTIN ALPHA-7
    REZEPTORAGONISTEN
                           ET COMPOSITIONS DE BENZYLIDENE-ANABASINES ET
PROCEDES
           D'UTILISATION
    CINNAMYLIDENE-ANABASINES
PATENT ASSIGNEE:
  University of Florida, (2395911), P.O. Box 115500, Gainesville, FL
    32611-5500, (US), (Proprietor designated states: all)
INVENTOR:
  MEYER, Edwin, 6101 N.W. 23rd Terrace, Gainesville, FL 32606, (US)
  KEM, William, R., 1809 N.W. 47th Street, Gainesville, FL 32605, (US)
  VAN HAAREN, Frans, 3807 N.W. 54th Way, Gainesville, FL 32653, (US)
  ZOLTEWICZ, John, A., 2330 N.W. 38th Street, Gainesville, FL 32605, (US)
  DEFIEBRE, Christopher, M., 7201 Mesa Verde Trail, Fort Worth, TX 76137,
    (US)
  PAPKE, Roger, 2521 N.W. 63rd Terrace, Gainesville, FL 32606, (US)
  DAY, Arthur, L., 2300 N.W. 29th Street, Gainesville, FL 32605, (US)
LEGAL REPRESENTATIVE:
  Glawe, Delfs, Moll & Partner (100691), Patentanwalte Rothenbaumchaussee
    58, 20148 Hamburg, (DE)
PATENT (CC, No, Kind, Date):
                              EP 1045842 A2 001025 (Basic)
                              EP 1045842 B1 030514
                              WO 99010338 990304
                              EP 98944579 980828; WO 98US17850 980828
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 924008 970829
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: C07D-401/00
NOTE:
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
               (English)
                           200320
                                       955
      CLAIMS B
      CLAIMS B
                 (German)
                           200320
                                       926
      CLAIMS B
                 (French)
                          200320
                                      1101
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(English) 200320
                                     15552
      SPEC B
Total word count - document A
                                        0
Total word count - document B
                                     18534
Total word count - documents A + B
                                     18534
 13/3,AB/22
                (Item 22 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
01015139
Anti-fas antibodies
Antikorper gegen Fas
Anticorps contre Fas
PATENT ASSIGNEE:
  Sankyo Company Limited, (204886), 5-1, Nihonbashi-Honcho 3-chome,
    Chuo-ku, Tokyo 103-8426, (JP), (applicant designated states:
    AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE)
INVENTOR:
  Serizawa, Nobufusa, Sankyo Company Limited, 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140, (JP)
  Ichikawa, Kimihisa, Sankyo Company Limited, 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140, (JP)
  Ohsumi, Jun, Sankyo Company Limited, 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140, (JP)
  Ohtsuki, Masahiko, Sankyo Company Limited, 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140, (JP)
  Haruyama, Hideyuki, Sankyo Company Limited, 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140, (JP)
  Takahashi, Tohru, Sankyo Company Limited, 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140, (JP)
  Yoshida, Hiroko, Sankyo Company Limited, 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140, (JP)
  Shiraishi, Akio, Sankyo Company Limited, 2-58, Hiromachi 1-chome,
    Shinagawa-ku, Tokyo 140, (JP)
  Yonehara, Shin, 9-5, Matsuoido-cho, Nishikyo-ku, Kyoto-shi, Kyoto-fu,
    (JP)
LEGAL REPRESENTATIVE:
  Gibson, Christian John Robert (30951), MARKS & CLERK, 57/60 Lincoln's Inn
    Fields, London WC2A 3LS, (GB)
PATENT (CC, No, Kind, Date): EP 909816 A1 990421 (Basic)
APPLICATION (CC, No, Date): EP 98302575 980401;
PRIORITY (CC, No, Date): JP 9782953 970401; JP 97169088 970625; JP 97276064
    971008
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;
  MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/13; C07K-016/28; C07K-014/705;
  C07K-016/46; C12N-015/62; C12N-015/70; C12N-001/21; A61K-039/395;
  C12N-005/20; C12N-015/06;
ABSTRACT EP 909816 A1
    Anti-human Fas antibodies which are cross-reactive with mouse and human
  Fas are useful in the treatment of conditions attributable to
  abnormalities in the Fas/Fas ligand system.
ABSTRACT WORD COUNT: 27
LANGUAGE (Publication, Procedural, Application): English; English;
FULLTEXT AVAILABILITY:
Available Text Language
                          Update
                                     Word Count
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Searcher :

Shears

571-272-2528

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CLAIMS A (English) 9916
                                      1824
                                     43101
      SPEC A (English) 9916
Total word count - document A
                                     44925
Total word count - document B
                                        0
Total word count - documents A + B
                                     44925
 13/3,AB/23
                (Item 23 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00967757
3-PYRIDYL ENANTIOMERS AND THEIR USE AS ANALGESICS
3-PYRIDYLENANTIOMERE UND IHRE VERWENDUNG ALS ANALGETIKA
ENANTIOMERES 3-PYRIDYL ET LEUR UTILISATION COMME ANALGESIQUES
PATENT ASSIGNEE:
  Abbott Laboratories, (225075), Chad 0377/AP6D-2, 100 Abbott Park Road,
    Abbott Park, Illinois 60064-3500, (US), (Proprietor designated states:
    all)
INVENTOR:
  HOLLADAY, Mark, W., 1003 Dawes Street, Libertyville, IL 60048, (US)
  ARNERIC, Stephen, P., 1521 Broad Run Rd., Landenberg PA 19350-1330, (US)
  BAI, Hao, 327 East Fawn Lane, Grayslake, IL 60030, (US)
  DART, Michael, J., 1026 Princeton Avenue, Highland Park, IL 60035, (US)
  LIN, Nan-Horng, 432 W Sycamore St., Vernon Hills, IL 60061-1078, (US)
  LYNCH, John, K., 8736 44th Avenue, Kenosha, WI 53142, (US)
  OR, Yat, Sun, 1107 Wellington Avenue, Libertyville, IL 60048, (US)
  RYTHER, Keith, B., 862 Waterview Drive, Round Lake Park, IL 60073, (US)
  SULLIVAN, James, P., 705 Dimmydale Drive, Deerfield, IL 60015, (US)
  WASICAK, James, T., 28440 Dorie Lane, Waterford, WI 53285, (US)
  EHRLICH, Paul, P., 1313 Bull Creek Drive, Libertyville, IL 60048, (US)
LEGAL REPRESENTATIVE:
  Modiano, Guido, Dr.-Ing. et al (40786), Modiano, Josif, Pisanty & Staub,
    Baaderstrasse 3, 80469 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 950057 A1
                                            991020 (Basic)
                              EP 950057 B1 021113
                              WO 98025920 980618
                              EP 97952392 971210; WO 97US22811 971210
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 763278 961210; US 32321 P 961210
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;
  NL; PT; SE
EXTENDED DESIGNATED STATES: RO; SI
INTERNATIONAL PATENT CLASS: C07D-401/12; A61K-031/44; C07D-205/04
NOTE:
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
                          200246
                                      2572
      CLAIMS B (English)
                          200246
      CLAIMS B
                 (German)
                                      2611
                                      2808
      CLAIMS B
                 (French)
                          200246
      SPEC B
                (English) 200246
                                     47623
Total word count - document A
Total word count - document B
                                     55614
Total word count - documents A + B
                                     55614
 13/3,AB/24
                (Item 24 from file: 348)
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Searcher : Shears 571-272-2528

DIALOG(R) File 348: EUROPEAN PATENTS

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```
MEDICINES COMPRISING Rho KINASE INHIBITOR
MEDIKAMENTE ENTHALTEND Rho-KINASE INHIBITOREN
MEDICAMENTS COMPRENANT UN INHIBITEUR DE LA Rho KINASE
PATENT ASSIGNEE:
  YOSHITOMI PHARMACEUTICAL INDUSTRIES, LTD., (208562), 6-9, Hiranomachi
    2-chome Chuo-ku, Osaka-shi Osaka 541, (JP), (Applicant designated
    States: all)
INVENTOR:
  UEHATA, Masayoshi, Yoshitomi Phar. Ind. Ltd., Res. Lab., 7-25, Koyata
    3-chome, Iruma-shi, Saitama 358, (JP)
```

ONO, Takashi, Yoshitomi Pharm. Ind., Ltd, Res. Lab., 7-25, Koyata 3-chome , Iruma-shi, Saitam 358, (JP)

SATOH, Hiroyuki, Yoshitomi Phar. Ind. Ltd., Res. Lab., 955, Oaza-Koiwai, Yoshitomimachi, Chikujo-gun, Fukuoka 871, (JP)

YAMAGAMI, Keiji, Yoshitomi Phar. Ind. Ltd., Res. Lab., 7-25, Koyata 3-chome, Iruma-shi, Saitama 358, (JP)

KAWAHARA, Toshio, Yoshitomi Phar. Ind. Ltd., Res. Lab., 955, Oaza-Koiwai, Yoshitomimachi, Chikujo-gun, Fukuoka 871, (JP)

LEGAL REPRESENTATIVE:

Weber, Thomas, Dr.Dipl.-Chem. et al (75092), Patentanwalte von Kreisler-Selting-Werner, Postfach 10 22 41, 50462 Koln, (DE) PATENT (CC, No, Kind, Date): EP 956865 Al 991117 (Basic)

WO 9806433 980219 EP 97934756 970808; WO 97JP2793 970808 APPLICATION (CC, No, Date): PRIORITY (CC, No, Date): JP 96212409 960812

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; RO; SI

INTERNATIONAL PATENT CLASS: A61K-045/00; A61K-031/16; A61K-031/165; A61K-031/195; A61K-049/00; A61K-031/445; A61K-031/50; A61K-031/495; A61K-031/44; C07D-213/81; C07D-401/12

## ABSTRACT EP 956865 A1

A Rho kinase inhibitor is provided as a novel pharmaceutical agent, particularly as a therapeutic agent of hypertension, a therapeutic agent of angina pectoris, a suppressive agent of cerebrovascular contraction, a therapeutic agent of asthma, a therapeutic agent of peripheral circulation disorder, a prophylactic agent of immature birth, a therapeutic agent of arteriosclerosis, an anti-cancer drug, an anti-inflammatory agent, an immunosuppressant, a therapeutic agent of autoimmune disease, an anti-AIDS drug, a contraceptive, a prophylactic agent of digestive tract infection, a therapeutic agent of osteoporosis, a therapeutic agent of retinopathy and a brain function improving drug. In addition, the Rho kinase inhibitor is provided as a reagent and a diagnostic.

ABSTRACT WORD COUNT: 110

LANGUAGE (Publication, Procedural, Application): English; English; Japanese FULLTEXT AVAILABILITY:

Available Text Language Word Count Update CLAIMS A (English) 9946 1777 13010 SPEC A (English) 9946 Total word count - document A 14787 Total word count - document B Total word count - documents A + B 14787

> 571-272-2528 Searcher : Shears

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13/3,AB/25
                (Item 25 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00748301
ANTI-INFLAMMATORY COMPOUNDS
ANTIINFLAMMATORISCHE VERBINDUNGEN
COMPOSES ANTI-INFLAMMATOIRES
PATENT ASSIGNEE:
  SMITHKLINE BEECHAM CORPORATION, (201246), One Franklin Plaza,
    Philadelphia, PA 19102, (US), (Proprietor designated states: all)
INVENTOR:
  ADAMS, Jerry Leroy, 611 Forest Road, Wayne, PA 19087, (US)
  HALL, Ralph Floyd, 1311 Prospect Hill Road, Villanova, PA 19085, (US)
  LEE, Dennis, Apartment 502 700 Ardmore Road, Ardmore, PA 19003, (US)
  MAYER, Ruth Judik, 115 Reveille Road, Wayne, PA 19087, (US)
  SEIBEL, George Leslie, 11 Cornwall Circle, Wayne, PA 19087, (US)
LEGAL REPRESENTATIVE:
  Connell, Anthony Christopher et al (69941), SmithKline Beecham plc
    Corporate Intellectual Property, Two New Horizons Court, Brentford,
    Middlesex TW8 9EP, (GB)
PATENT (CC, No, Kind, Date): EP 799198 A1
                                             971008 (Basic)
                              EP 799198 A1
                              EP 799198 B1
                                             000830
                              WO 9533461 951214
                              EP 95922184 950602; WO 95US7010 950602
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 252717 940602
DESIGNATED STATES: BE; CH; DE; FR; GB; IT; LI; NL
INTERNATIONAL PATENT CLASS: C07C-311/21; A61K-031/195; C07C-311/13
NOTE:
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS B (English)
                          200035
                                       437
                          200035
                (German)
                                       394
      CLAIMS B
                 (French) 200035
                                       519
      CLAIMS B
      SPEC B
                (English) 200035
                                     13765
Total word count - document A
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Total word count - document B
Total word count - documents A + B
                                     15115
 13/3,AB/26
                (Item 26 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00746719
ANTI-INFLAMMATORY COMPOUNDS
ENTZUNDUNGSHEMMENDE VERBINDUNGEN
COMPOSES ANTI-INFLAMMATOIRES
PATENT ASSIGNEE:
  SMITHKLINE BEECHAM CORPORATION, (201245), UW2220, 709 Swedeland Road,
    P.O. Box 1539, King of Prussia, PA 19406-0939, (US), (Proprietor
    designated states: all)
  THE JOHNS HOPKINS UNIVERSITY, (348140), 720 Rutland Avenue, Baltimore, MD
    21205, (US), (Proprietor designated states: all)
INVENTOR:
```

Searcher :

Shears

571-272-2528

```
DIXON, James, Scott, SmithKline Beecham, Pharmaceu, ticals R & D, 709
    Swedeland Road, King of Prussia, PA 19406, (US)
  HALL, Ralph, Floyd, SmithKline Beecham, Pharmaceut, icals R & D, 709
    Swedeland Road, King of Prussia, PA 19506, (US)
  MARSHALL, Lisa, Ann, SmithKline Beecham, Pharmaceu, ticals R & D, 709
    Swedeland Road, King of Prussia, PA 19406, (US)
  CHILTON, Floyd, H., Wake Forest University, Medical Center Blvd., Winston
    Salem, NC 27267-1023, (US)
  MAYER, Ruth, Judik, SmithKline Beecham Pharmaceuti, cals R & D, 709
    Swedeland Road, King of Prussia, PA 19406, (US)
  WINKLER, James, David, SmithKline Beecham Pharmace, uticals R & D, 709
    Swedeland Road, King of Prussia, PA 19406, (US)
LEGAL REPRESENTATIVE:
  Connell, Anthony Christopher et al (69941), SmithKline Beecham plc
    Corporate Intellectual Property, Two New Horizons Court, Brentford,
    Middlesex TW8 9EP, (GB)
PATENT (CC, No, Kind, Date): EP 765305 A1 970402 (Basic)
                              EP 765305 A1
                                             970903
                              EP 765305 B1
                                              991215
                              WO 9533712 951214
                              EP 95922898 950602; WO 95US6677 950602
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 252716 940602
DESIGNATED STATES: BE; CH; DE; FR; GB; IT; LI; NL
INTERNATIONAL PATENT CLASS: C07C-301/02; A61K-031/21
NOTE:
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
                           9950
                                        623
      CLAIMS B
                (English)
                           9950
                                        617
      CLAIMS B
                 (German)
                           9950
                                        777
      CLAIMS B
                 (French)
      SPEC B
                (English)
                           9950
                                      11322
Total word count - document A
Total word count - document B
                                      13339
Total word count - documents A + B
                                     13339
                (Item 27 from file: 348)
 13/3,AB/27
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00702636
Protein having TPO activity.
Protein mit TPO-Aktivitat.
Proteine a activite TPO.
PATENT ASSIGNEE:
  Kirin Brewery Company, Ltd., (789432), 10-1, 2-chome, Shinkawa, Chuo-ku,
    Tokyo, (JP), (applicant designated states:
    AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE)
INVENTOR:
  Miyazaki, Hiroshi, 817-17 Shimonojo-machi Takasaki-shi, Gunma-ken, (JP)
  Kato, Takashi, 819-8 Shimonojo-machi Takasaki-shi, Gunma-ken, (JP)
  Ohgami, Kinya, B-102 Shikishima-Ryo 2-37-16 Kami-Koide-machi,
    Maebashi-shi Gunma-ken, (JP)
  Iwamatsu, Akihiro, Belvedere A201 6-20-42 Tomiokahigashi, Kanazawa-ku
    Yokohama-shi Kanagawa-ken, (JP)
  Akahori, Hiromichi, 3439-78-2 Ishihara-machi Takasaki-shi, Gunma-ken,
    (JP)
```

Kuroki, Ryota, 13-20-2, Noukendai 5-chome Kanazawa-ku, Yokohama.shi, (JP) Shimizu, Toshiyuki, 35-6-101, Noukendai 6-chome Kanazawa-ku, Yokohama-shi Kanagawa-ken, (JP)

Muto, Takanori, Kanazawahakkei-Ryo 102 2-8-4 Teramae, Kanazawa-ku Yokohama-shi Kanagawa-ken, (JP)

LEGAL REPRESENTATIVE:

UEXKULL & STOLBERG Patentanwalte (100011), Beselerstrasse 4, D-22607 Hamburg, (DE)

PATENT (CC, No, Kind, Date): EP 668352 Al 950823 (Basic)

APPLICATION (CC, No, Date): EP 95200385 950214;

PRIORITY (CC, No, Date): JP 9439090 940214; JP 9479842 940325; JP 94155126 940601; JP 94167328 940615; JP 94227159 940817; JP 94304167 941101; JP 94341200 941228; JP 94193169 940817; JP 94298669 941201; JP 94193916 940818; US 212164 940314; US 221020 940401; US 278083 940720; US 320300 941011; US 361811 941222; US 381478 950131

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: C12N-015/19

# ABSTRACT EP 668352 A1

The present invention relates to thrombopoietin (TPO) polypeptides having the biological activity of specifically stimulating or increasing platelet production comprising the amino acid sequence 1-332 of SEQ ID NO: 6 or a derivative thereof, DNA molecules encoding TPO polypeptides, processes for production of the polypeptides, antibodies specifically immunoreactive with the polypeptides, pharmaceutical compositions comprising the polypeptides, and methods for using the polypeptides in treatment of platelet disorders such as thrombocytopenia. (see image in original document)

ABSTRACT WORD COUNT: 77

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS A (English) EPAB95 1234

SPEC A (English) EPAB95 73519

Total word count - document A 74753

Total word count - document B 0

Total word count - documents A + B 74753

13/3,AB/28 (Item 28 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

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#### 00637707

MONOCLONAL ANTIBODIES DIRECTED AGAINST THE MICROTUBULE-ASSOCIATED PROTEIN TAU, HYBRIDOMAS SECRETING THESE ANTIBODIES, ANTIGEN RECOGNITION BY THESE MONOCLONAL AN

MONOKLONALE ANTIKORPER GEGEN DAS MIKROTUBULUSASSOZIIERTE TAUPROTEIN, HYBRIDOMEN, DIE DIESE ANTIKORPER SEZERNIEREN, ANTIGENERKENNUNG DURCH DIESE MONOKLONALEN ANTI

ANTICORPS MONOCLONAUX DIRIGES CONTRE LA PROTEINE TAU ASSOCIEE AUX MICROTUBULES, HYBRIDOMES SECRETANT CES ANTICORPS, RECONNAISSANCE D'ANTIGENES PAR CES ANTICORPS

## PATENT ASSIGNEE:

N.V. INNOGENETICS S.A., (713141), Industriepark Zwijnaarde 7, Box 4, 9052 Gent, (BE), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

```
INVENTOR:
  VANDERMEEREN, Marc, Armand Preud'Homme Straat 10, B-2440 Geel, (BE)
  MERCKEN, Marc, Durhamstreet 5A, Somerville, MA 02143, (US)
  VANMECHELEN, Eugeen, Ten Edestraat 101, B-9810 Nazareth-Eke, (BE)
  VAN DE VOORDE, Andre, Groenstraat 22, B-9160 Lokeren, (BE)
LEGAL REPRESENTATIVE:
  De Clercq, Ann G. Y. (87751), Innogenetics N.V., Industriepark Zwijnaarde
    7, P.O. Box 4, 9052 Gent, (BE)
PATENT (CC, No, Kind, Date): EP 673418 A1 950927 (Basic)
                              EP 673418 B1 980506
                              WO 9413795 940623
                              EP 94903752 931210; WO 93EP3499 931210
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): EP 92403403 921214
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;
  NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/06; C12P-021/08; C12N-005/20;
  C07K-016/18; C07K-014/47; G01N-033/577; G01N-033/68;
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS B (English) 9819
                                      1242
                           9819
                                      1225
      CLAIMS B
                (German)
      CLAIMS B
                 (French)
                           9819
                                      1342
                                      8015
      SPEC B
                (English) 9819
Total word count - document A
Total word count - document B
                                     11824
Total word count - documents A + B
                                     11824
 13/3,AB/29
               (Item 29 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00625833
MONOCLONAL ANTIBODIES DIRECTED AGAINST THE MICROTUBULE-ASSOCIATED PROTEIN
    TAU
Monoklonale Antikorper gegen das mikrotubulusassoziierte Protein Tau.
ANTICORPS MONOCLONAUX DIRIGES CONTRE LA PROTEINE TAU ASSOCIEE AUX
    MICROTUBULES
PATENT ASSIGNEE:
  N.V. INNOGENETICS S.A., (713141), Industriepark Zwijnaarde 7, Box 4, 9052
    Gent, (BE), (applicant designated states:
    AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; SE)
INVENTOR:
  MERCKEN, Marc, 5A Durhamstreet, Somerville, MA 02143, (US)
  MANDELKOW, Eva-Maria, Baron-Voght-Strasse 212a, D-2000 Hamburg 52, (DE)
  VANDERMEEREN, Marc, Armand Preud'Homme Straat 10, B-2440 Geel, (BE)
  VANMECHELEN, Eugeen, Ten Edestraat 101, B-9810 Nazareth-Eke, (BE)
  VAN DE VOORDE, Andre, Groenstraat 22, B-9160 Lokeren, (BE)
LEGAL REPRESENTATIVE:
  Gutmann, Ernest et al (15992), Ernest Gutmann - Yves Plasseraud S.A. 3,
    rue Chauveau-Lagarde, F-75008 Paris, (FR)
                                            940817 (Basic)
PATENT (CC, No, Kind, Date): EP 610330 A1
                              EP 610330 B1 970618
                              WO 9308302 930429
                              EP 92922432 921017; WO 92EP2392 921017
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): EP 91402871 911025
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Searcher

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Shears 571-272-2528

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DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;
  NL; SE
INTERNATIONAL PATENT CLASS: C12P-021/08; C12N-005/20; C07K-002/00;
  C12N-015/06; G01N-033/577;
NOTE:
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS B
               (English)
                           EPAB97
                                      1415
      CLAIMS B
                 (German)
                           EPAB97
                                       1414
                 (French)
                           EPAB97
                                      1490
      CLAIMS B
      SPEC B
                (English) EPAB97
                                      8084
Total word count - document A
                                         0
Total word count - document B
                                     12403
Total word count - documents A + B
                                     12403
 13/3,AB/30
                (Item 30 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00612002
IMMUNOTOXINS DIRECTED AGAINST c-erbB-2 (HER-2/neu) RELATED SURFACE ANTIGENS
GEGEN
        C-ERB
               B-2 (HER-2/NEU) VEWANDTE OBERFLACHENANTIGENE GERICHTETE
    IMMUNTOXINE
IMMUNOTOXINES DIRIGEES CONTRE DES ANTIGENES DE SURFACE APPARENTEES A
    c-erbB-2 (HER-2/neu)
PATENT ASSIGNEE:
  RESEARCH DEVELOPMENT FOUNDATION, (1119572), 402 North Division Street,
    Carson City, Nevada 89703, (US), (Proprietor designated states: all)
INVENTOR:
  ROSENBLUM, Michael G., 8810 North Rylander Circle, Houston, TX 77071,
    (US)
  SHAWVER, Laura K., 216 Cotter street, San Fransisco, CA 94112-1933, (US)
LEGAL REPRESENTATIVE:
  Wilkinson, Stephen John et al (52061), Stevens, Hewlett & Perkins 1 St.
    Augustine's Place, Bristol BS1 4UD, (GB)
PATENT (CC, No, Kind, Date): EP 635030 A1
                                             950125 (Basic)
                                             980708
                              EP 635030 A1
                                             040721
                              EP 635030 B1
                              WO 1993021232
                                             931028
APPLICATION (CC, No, Date):
                              EP 93912147 930408; WO 93US3292 930408
PRIORITY (CC, No, Date): US 867728 920410
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;
  NL: PT: SE
INTERNATIONAL PATENT CLASS: C07K-014/415; A61K-039/395; A61K-047/48
NOTE:
  No A-document published by EPO
  Figure number on first page: NONE
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
                           200430
                                       564
      CLAIMS B
               (English)
                           200430
      CLAIMS B
                                       552
                 (German)
      CLAIMS B
                                       599
                 (French)
                           200430
      SPEC B
                (English)
                           200430
                                     10676
Total word count - document A
Total word count - document B
                                     12391
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Total word count - documents A + B 12391

(Item 31 from file: 348) 13/3,AB/31 DIALOG(R) File 348: EUROPEAN PATENTS (c) 2005 European Patent Office. All rts. reserv. 00601361 Pharmaceutical compositions containing botulinum toxin and method of preparation. Pharmazeutische Zusammensetzungen, die Botulinumtoxin enthalten und Verfahren zur Herstellung. Compositions pharmaceutiques contenant la toxine de botulinum et procede de preparation. PATENT ASSIGNEE: WISCONSIN ALUMNI RESEARCH FOUNDATION, (319666), P.O. Box 7365, Madison, WI 53705-7365, (US), (applicant designated states: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE) INVENTOR: Schantz, Edward J., 5102 South Hill Drive, Madison WI 53705, (US) Goodnough, Michael C., 6914 Harvest Hill Road, Madison WI 53717, (US) Johnson, Eric A., 3901 Council Court, Madison WI 53711, (US) LEGAL REPRESENTATIVE: Ellis-Jones, Patrick George Armine (30442), J.A. KEMP & CO. 14 South Square Gray's Inn, London WC1R 5LX, (GB) PATENT (CC, No, Kind, Date): EP 593176 A2 940420 (Basic) EP 593176 A3 950301 EP 93307656 930928; APPLICATION (CC, No, Date): PRIORITY (CC, No, Date): US 951604 920928 DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE INTERNATIONAL PATENT CLASS: A61K-039/08; ABSTRACT EP 593176 A2 A pharmaceutical composition contains active lyophilized botulinum toxin type A, no sodium chloride and less than about 25 % inactive toxin is disclosed along with a method of preparing it. ABSTRACT WORD COUNT: 32

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) EPABF2 190
SPEC A (English) EPABF2 1928
Total word count - document A 2118
Total word count - document B 0
Total word count - documents A + B 2118

13/3,AB/32 (Item 32 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.

## 00577652

COMPOSITIONS AND METHODS FOR IDENTIFYING BIOLOGICALLY ACTIVE MOLECULES ZUSAMMENSETZUNGEN UND VERFAHREN ZUR IDENTIFIZIERUNG VON MOLEKULEN MIT BIOLOGISCHER WIRKSAMKEIT

COMPOSITIONS ET PROCEDES D'IDENTIFICATION DE MOLECULES BIOLOGIQUEMENT

```
ACTIVES
PATENT ASSIGNEE:
  CHIRON CORPORATION, (572535), 4560 Horton Street, Emeryville, California
    94608-2916, (US), (applicant designated states:
    AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE)
INVENTOR:
  DEVLIN, James, J., 1146 Upper Happy Valley, Lafayette, CA 94549, (US)
LEGAL REPRESENTATIVE:
  Hallybone, Huw George et al (53031), CARPMAELS AND RANSFORD 43 Bloomsbury
    Square, London WC1A 2RA, (GB)
PATENT (CC, No, Kind, Date): EP 600866 A1 940615 (Basic)
                               EP 600866 B1
                                              971203
                               WO 9118980 911212
APPLICATION (CC, No, Date):
                               EP 91910915 910513; WO 91US3332 910513
PRIORITY (CC, No, Date): US 533180 900601
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: C12N-015/10; C12N-015/62; C12N-015/34;
  C12N-015/70; C12N-015/00; C07K-007/06
NOTE:
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
                                      Word Count
Available Text Language
                            Update
      CLAIMS B
                (English)
                            9711W4
                                         302
      CLAIMS B
                            9711W4
                                         239
                 (German)
      CLAIMS B
                 (French)
                            9711W4
                                        350
      SPEC B
                 (English)
                            9711W4
                                        7112
Total word count - document A
Total word count - document B
                                       8003
Total word count - documents A + B
                                       8003
 13/3,AB/33
                 (Item 33 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00558043
GENETICALLY ENGINEERED VACCINE STRAIN
GENTECHNOLOGISCH HERGESTELLTER STAMM FUR IMPFSTOFFE
SOUCHE DE VACCIN MISE AU POINT PAR GENIE GENETIQUE
PATENT ASSIGNEE:
  VIROGENETICS CORPORATION, (1534420), 465 Jordan Road, Rensselaer
    Technology Park, Troy, NY 12180, (US), (Proprietor designated states:
    all)
INVENTOR:
  PAOLETTI, Enzo, 297 Murray Avenue, Delmar, NY 12054, (US)
  PERKUS, Marion E., Box 267A, R.D. No. 2, 4971 Western Turnpike, Altamont,
    NY 12009, (US)
  TAYLOR, Jill, 33 Colonial Avenue, Albany, NY 12203, (US)
  TARTAGLIA, James, 7 Christina Drive, Schenectady, NY 12303, (US)
 NORTON, Elizabeth, K., 33 Cayuga Court, Averill Park, New York 12018-9672
    , (US)
  RIVIERE, Michel, 11, chemin du Chancellier, F-69130 Ecully, (FR)
  DE TAISNE, Charles, 48 bis, rue du Commandant-Charcot, F-69005 Lyon, (FR)
  LIMBACH, Keith, J., 324 Hampton Place, Troy, NY 12180, (US)
  JOHNSON, Gerard, P., 100 Devitt Road, Waterford, NY 12188, (US) PINCUS, Steven, E., 78 Troy Road, East Greenbush, NY 12061, (US)
  COX, William, I., 1 Washington Place, Troy, NY 12180, (US)
  FRANCIS, Jean-Christophe, 596 Warren Street, Apt. No. 6, Albany, NY 12202
```

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, (US)
  GETTIG, Russell, Robert, R.D. 2, Box 421C, Averill Park, NY 12018, (US)
LEGAL REPRESENTATIVE:
  Harding, Charles Thomas et al (70742), D. Young & Co. 21 New Fetter Lane,
    London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 575491 Al
                                            931229 (Basic)
                              EP 575491 A1 941012
                              EP 575491 B1 030813
                              WO 92015672 920917
APPLICATION (CC, No, Date):
                              EP 92908110 920309; WO 92US1906 920309
PRIORITY (CC, No, Date): US 666056 910307; US 713967 910611; US 847951
    920306
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; MC; NL;
RELATED DIVISIONAL NUMBER(S) - PN (AN):
     (EP 2003018214)
INTERNATIONAL PATENT CLASS: C12N-007/00; A61K-039/12; C12N-015/863
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS B (English) 200333
                                       453
                (German) 200333
      CLAIMS B
                                       389
                          200333
                                       595
     CLAIMS B
                 (French)
      SPEC B
                (English) 200333
                                    100952
Total word count - document A
Total word count - document B
                                    102389
Total word count - documents A + B 102389
               (Item 34 from file: 348)
 13/3,AB/34
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00499265
A NEW METHOD FOR DETECTING A SPECIFIC NUCLEIC ACID SEQUENCE IN A SAMPLE OF
    CELLS
NEUES VERFAHREN ZUM NACHWEIS EINER SPEZIFISCHEN NUKLEINSAURESEQUENZ IN
    EINER ZELLPROBE
NOUVELLE METHODE PERMETTANT DE DETECTER UNE SEQUENCE D'ACIDE NUCLEIQUE
    SPECIFIQUE A PARTIR D'UN PRELEVEMENT DE CELLULES
PATENT ASSIGNEE:
  Pharmacia Biotech AB, (1345733), , 751 82 Uppsala, (SE), (applicant
    designated states: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE)
INVENTOR:
  FROSTELL, Asa, Norrtaljeg 7A, S-75327 Uppsala, (SE)
  NUNN, Michael, F., 699 South Nardo Avenue, T6, Solana Beach, CA 92075,
    (US)
LEGAL REPRESENTATIVE:
  Widen, Bjorn et al (39502), Pharmacia & Upjohn AB, Patent Department, 751
    82 Uppsala, (SE)
PATENT (CC, No, Kind, Date): EP 504278 A1 920923 (Basic)
                              EP 504278 A1
                                            930609
                              EP 504278 B1 970115
                              WO 9108308 910613
                              EP 91901361 901129; WO 90US6953 901129
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 443910 891130; US 505833 900406; US 548027
```

900705

Searcher

:

Shears

571-272-2528

```
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: C12Q-001/68; C12Q-001/70; C12N-015/11;
  C12N-005/10;
NOTE:
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS B
               (English)
                           EPAB97
                                       798
      CLAIMS B
                (German)
                           EPAB97
                                       703
      CLAIMS B
                 (French)
                           EPAB97
                                       879
                (English) EPAB97
      SPEC B
                                     11640
Total word count - document A
Total word count - document B
                                     14020
Total word count - documents A + B
                                     14020
 13/3,AB/35
              (Item 35 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
00498736
ANTIVENOMS AND METHODS FOR MAKING ANTIVENOMS
GEGENGIFTE UND VERFAHREN ZU DEREN HERSTELLUNG
SERUMS ANTIVENIMEUX ET LEURS PROCEDES DE FABRICATION
PATENT ASSIGNEE:
  CARROLL, Sean B., (1373820), 3066 Streb Way, Cottage Grove, WI 53527,
    (US), (applicant designated states:
    AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE)
INVENTOR:
  CARROLL, Sean B., 3066 Streb Way, Cottage Grove, WI 53527, (US)
LEGAL REPRESENTATIVE:
  Glawe, Delfs, Moll & Partner (100692), Patentanwalte Postfach 26 01 62,
    80058 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 498854 Al 920819 (Basic)
                                             930303
                              EP 498854 A1
                              EP 498854 B1
                                            980826
                              WO 9106306 910516
                              EP 91900530 901031; WO 90US6341 901031
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 429791 891031
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: A61K-035/16; A61K-039/395; C07K-001/00;
  C07K-017/08; C07K-002/00; G01N-033/538; C08G-063/48;
  No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                                     Word Count
                           Update
                          9835
                                      3496
      CLAIMS B (English)
      CLAIMS B
                 (German) 9835
                                      3591
                 (French) 9835
                                      3977
      CLAIMS B
      SPEC B
                (English) 9835
                                     31700
Total word count - document A
Total word count - document B
                                     42764
Total word count - documents A + B
                                     42764
 13/3,AB/36
                (Item 36 from file: 348)
```

Searcher : Shears 571-272-2528

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

#### 00459428

Human monoclonal antibodies against bacterial toxins.

Menschliche monoklonale Antikorper gegen bakterielle Toxine.

Anticorps monoclonaux humains contre des toxines bacteriennes.

PATENT ASSIGNEE:

THE UNIVERSITY OF ROCHESTER, (290260), 601 Elmwood Avenue, Rochester, New York 14642, (US), (applicant designated states:

AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE)

#### INVENTOR:

Insel, Richard Alan, 167 Oakdale Drive,, Rochester, New York 14618, (US) Gigliotti, Francis, 63 Caversham Woods, Pittsford, New York 14534, (US) LEGAL REPRESENTATIVE:

Warcoin, Jacques et al (19071), Cabinet Regimbeau 26, avenue Kleber, F-75116 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 440266 A2 910807 (Basic)

EP 440266 A3 910828

APPLICATION (CC, No, Date): EP 91105163 830929;

PRIORITY (CC, No, Date): US 428747 820930

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 105804

INTERNATIONAL PATENT CLASS: C12N-015/08; C12N-005/28; C12P-021/08; A61K-039/40;

## ABSTRACT EP 440266 A2

The production of stable hybrid cell lines that secrete human monoclonal antibodies against bacterial toxins by fusing post-immunization human peripheral blood lymphocytes with nonsecretor mouse myeloma cells is described. Using the method, protective monoclonal antibodies against tetanus toxin and diphtheria toxin were produced that bind tetanus toxin and diphtheria toxin in vitro, respectively, and prevent tetanus and diphtheria in vivo in animals, respectively.

ABSTRACT WORD COUNT: 65

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) EPABF1 1133
SPEC A (English) EPABF1 10206
Total word count - document A 11339
Total word count - document B 0
Total word count - documents A + B 11339

13/3,AB/37 (Item 37 from file: 348) DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2005 European Patent Office. All rts. reserv.

#### 00338241

Chemically regulatable DNA sequences and genes and uses thereof. Chemisch regulierte Sequenzen und Gene, und ihre Verwendungen. Sequences d'ADN et genes chimiquement regulables, et leur emploi. PATENT ASSIGNEE:

CIBA-GEIGY AG, (201300), Klybeckstrasse 141, CH-4002 Basel, (CH), (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE) INVENTOR:

Ryals, John, 415 Dunhill Circle, Durham, NC 27713, (US)

Montoya, Alice, , deceased, (US)
Harms, Christian, 1412 Gray Bluff Trail, Chapel Hill, NC 27514, (US)
Duesing, John, Gatternweg 18, CH-4125 Riehen, (CH)
Sperisen, Christoph, Landskronstrasse 4, CH-4056 Basel, (CH)
Meins, Fred, Leimgrubenweg 52, CH-4125 Riehen, (CH)
Payne, George, 804 B7 Park Ridge Road, Durham, NC 27713, (US)
LEGAL REPRESENTATIVE:

Zumstein, Fritz, Dr. et al (13567), Patentanwalte, Dr. F. Zumstein, Dipl.-Ing. F. Klingseisen, Brauhausstrasse 4, 80331 Munchen, (DE) PATENT (CC, No, Kind, Date): EP 332104 A2 890913 (Basic) EP 332104 A3 910320

APPLICATION (CC, No, Date): EP 89103888 890306;
PRIORITY (CC, No, Date): US 165667 880308; US 305566 890206
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE INTERNATIONAL PATENT CLASS: C12N-015/00;

## ABSTRACT EP 332104 A2

The present invention provides chemically regulatable DNA sequences capable of regulating transcription of an associated DNA sequence in plants or plant tissues, chimeric constructions containing such sequences, vectors containing such sequences and chimeric constructions, and transgenic plants and plant tissues containing these chimeric constructions. Also provided are a novel signal peptide sequence, genes which code for this sequence, and newly identified PR protein genes. The chimeric constructions and transgenic plants and plant tissues may be used in an assay for new chemical regulators.

ABSTRACT WORD COUNT: 87

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) EPABF1 3526
SPEC A (English) EPABF1 33592
Total word count - document A 37118
Total word count - document B 0
Total word count - documents A + B 37118

13/3,AB/38 (Item 38 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.

## 00273288

Pharmaceutically active compounds.

Pharmazeutische aktive Verbindungen.

Composes pharmaceutiques actifs.

## PATENT ASSIGNEE:

SCHERING CORPORATION, (240551), 2000 Galloping Hill Road, Kenilworth New Jersey 07033, (US), (applicant designated states:

AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE)

## INVENTOR:

Girijavallabhan, Viyyoor Moopil, 10 Maplewood Drive, Parsippany, N.J. 07054, (US)

Pinto, Patrick Anthony, 232 Randolph Avenue, Mine Hill, N.J. 07801, (US) Ganguly, Ashit Kumar, 96 Cooper Avenue, Upper Montclain, N.J. 07043, (US) Versace, Richard William, 65B Townsend Road, Wanaque, N.J. 07465, (US) LEGAL REPRESENTATIVE:

Ritter, Stephen David et al (35281), Mathys & Squire 10 Fleet Street, London EC4Y 1AY, (GB)

PATENT (CC, No, Kind, Date): EP 274867 A2 880720 (Basic)

EP 274867 A3 901114 EP 274867 B1 940413

EP 87310807 871209;

APPLICATION (CC, No, Date): EP 87310807 PRIORITY (CC, No, Date): US 940125 861210

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE INTERNATIONAL PATENT CLASS: C07D-233/60; A61K-031/415; C07D-277/36;

C07D-257/04; C07D-213/70; C07D-257/06; C07D-213/30; C07D-239/54;

C07D-233/70; C07D-233/94; C07D-235/06;

#### ABSTRACT EP 274867 A2

The disclosed invention is compounds represented by the formula (see image in original document) and pharmaceutically acceptable acid addition, basic addition and quarternary amine salts thereof and pharmaceutically acceptable solvates thereof, wherein each Z is independently tetiary butyl, phenyl, naphthyl or adamantyl; substituted phenyl, wherein the substituents are one or more of halogen, lower alkoxy, phenoxy, nitrile, nitro, phenyslsulfonyl, lower alkylsulfonyl, oxazol-2-yl, lower alkanoyl, benzoyl, lower alkoxycarbonyl, lower alkyl, lower alkylthio, phenyl, phenylaminothiocarbonyl, or lower alkylaminothiocarbonyl; 4 or 6 membered unsubstituted or substituted heterocyclic ring containing at least one nitrogen with the remaining members of the ring being at least one carbon, and optionally sulfur or oxygen, wherein the substituents are one or more of carboxyl, hydroxymethyl, lower alkyl, loweralkylcarbonyl or aryl lower alkyl;

X and Y are each independently a bond, -O-, (see image in original document) each Q is independently a divalent substituted or unsubstituted, straigh or branched chain lower alkanediyl, lower alkanediyl-cycloalkaneidyl-lower alkanediyl, lower alkenediyl, lower alkynediyl, phenylene, dihydrofurandiyl, tetrahydrofurandiyl, tetrahydrofurandiyl, or,

loweralkanediyl-tetrahydrofurandiyl-loweralkanediyl, wherein the substituents are one or more of hydroxy, epoxy, fluorine, chlorine, azide, or amino;

W is a monovalent substituted or unsubstituted aryl group or a heterocyclic single or fused ring containing from 4 to 10 ring atoms, at least one hetero atom of which is a nitrogen atom and the remaining ring atoms being at least one carbon and optionally sulfur or oxygen, wherein the substituents are one or more of hydroxy, oxo amino, carbamoyl, carboxyl, nitrile, nitro, lower alkoxy carbonyl, halogen, sulfamyl, lower alkyl, lower alkylthio, lower alkoxy, hydroxyloweralkyl, lower alkoxycarbonylloweralkyl, amino loweralkyl, carboxyloweralkyl, guanidino, thioureido, lower alkylsulfonylamino, aminocarbonylloweralkyl, allyloxycarbonylmethyl or carbamoyloxyloweralkyl; with the proviso that W cannot be substituted or unsubstituted isoxazolyl, and W(') is divalent W.

The compounds have antiviral activity, antiinflammatory activity and are PAF inhibitors.

ABSTRACT WORD COUNT: 303

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Word Count Update Available Text Language CLAIMS B (English) EPBBF1 2124 (German) EPBBF1 1950 CLAIMS B CLAIMS B (French) EPBBF1 2249 SPEC B (English) EPBBF1 6876 Total word count - document A

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Total word count - document B
                                     13199
Total word count - documents A + B
 13/3,AB/39
                (Item 39 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.
Human monoclonal antibodies against bacterial toxins.
Menschliche monoklonale Antikorper gegen bakterielle Toxine.
Anticorps monoclonaux humains contre des toxines bacteriennes.
PATENT ASSIGNEE:
  THE UNIVERSITY OF ROCHESTER, (290260), 601 Elmwood Avenue, Rochester, New
    York 14642, (US), (applicant designated states:
    AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE)
INVENTOR:
  Insel, Richard Alan, 167 Oakdale Drive, Rochester New York 14618, (US)
  Gigliotti, Francis, 25 N. Alicia Drive, Memphis Tennessee 38112, (US)
LEGAL REPRESENTATIVE:
  Martin, Jean-Jacques et al (17181), Cabinet REGIMBEAU 26, Avenue Kleber,
    F-75116 Paris, (FR)
PATENT (CC, No, Kind, Date): EP 105804 A2 840418 (Basic)
                              EP 105804 A3 860813
                              EP 105804 B1 911211
APPLICATION (CC, No, Date):
                              EP 83401913 830929;
PRIORITY (CC, No, Date): US 428747 820930
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: C12P-021/08;
ABSTRACT EP 105804 A2
    Human monoclonal antibodies against bacterial toxins.
    The production of stable hybrid cell lines that secrete human
  monoclonal antibodies against bacterial toxins by fusing
  post-immunization human peripheral blood lymphocytes with nonsecretor
  mouse myeloma cells is described. Using the method, protective monoclonal
  antibodies against tetanus toxin and diphtheria toxin were produced that
  bind tetanus toxin and diphtheria toxin in vitro, respectively, and
  prevent tetanus and diphtheria in vivo in animals, respectively.
ABSTRACT WORD COUNT: 71
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS B (English) EPBBF1
                                       162
                                       167
      CLAIMS B
                 (German) EPBBF1
                                       178
      CLAIMS B
                 (French) EPBBF1
                                     10188
      SPEC B
                (English) EPBBF1
Total word count - document A
Total word count - document B
                                     10695
Total word count - documents A + B
                                     10695
                                                    - Author (5)
        Items
                Description
Set
S14
                AU=(MOYER, E? OR MOYER E?)
          173
S15
           7
                AU=(HIRTZER, P? OR HIRTZER P?)
            1
S16
                S14 AND S15
S17
           14
                (S14 OR S15) AND S3
S18
            1
                S17 AND S2
S19
           0
                (S16 OR S18) NOT S12
```

Searcher :

Shears

571-272-2528

? log y 27oct05 13:37:31 User219783 Session D2121.3

```
? show files; ds
File 65:Inside Conferences 1993-2005/Oct W4
         (c) 2005 BLDSC all rts. reserv.
File 440: Current Contents Search (R) 1990-2005/Oct 27
         (c) 2005 Inst for Sci Info
File 348: EUROPEAN PATENTS 1978-2005/Oct W03
         (c) 2005 European Patent Office
File 357: Derwent Biotech Res. 1982-2005/Oct W5
         (c) 2005 Thomson Derwent & ISI
File 113: European R&D Database 1997
         (c) 1997 Reed-Elsevier (UK) Ltd All rts reserv
Set
        Items
                Description
                (BO OR BOTULIN?) (5N) (NT OR NEUROTOXIN? ? OR TOXIN? ? OR TO-
S1
      4607135
             X??) OR BOTOX?? OR BONT?? OR BOTX?? OR BTX?? OR (BT OR BN OR -
             BNT??) (10N) BOTULIN? OR BOTULIN? (3A) (A OR B OR C1 OR C2 OR D OR
              E OR F OR G)
S2
                (BO OR BOTULIN?) (5N) (NT OR NEUROTOXIN? ? OR TOXIN? ? OR TO-
        10936
             X??) OR BOTOX?? OR BONT?? OR BOTX?? OR BTX?? OR (BT OR BN OR -
             BNT??) (10N) BOTULIN? OR BOTULIN? (3N) (A OR B OR C1 OR C2 OR D OR
              E OR F OR G)
                PHOSPHATE OR SUCCINATE OR SUCCINIC OR ACETATE OR CITRATE OR
S3
       517116
              BUTANEDIOIC OR ACETIC
          901
S4
                S2 AND S3
S5
          335
                S4 AND (NACL OR (NA OR SODIUM) (W) (CL OR CHLORIDE) OR SALIN-
S6
          158
               S5 AND (HSA(S)ALBUMIN OR SER??(W)ALBUMIN OR GELATIN? ?)
s7
               S6 AND BUFFER?
          146
                S7 AND (TEMP? ? OR TEMPERATURE? ?)
S8
          131
               S8 AND (PH OR (HYDROGEN OR H) (W) ION)
S9
          125
S10
           7
                S9 AND (CENTIGRADE OR CELSIUS)
S11
           33
              S9 AND ((UNIT? ? OR U)(2N)(ML OR MILLILIT? OR MILLI(W)(LIT-
             ER? OR LITRE?)))
S12
           39
               S10 OR S11
S13
           39
                RD (unique items)
S14
          173
                AU= (MOYER, E? OR MOYER E?)
           7
S15
                AU=(HIRTZER, P? OR HIRTZER P?)
S16
               S14 AND S15
           1
S17
           14 (S14 OR S15) AND S3
S18
           1 S17 AND S2
           0 (S16 OR S18) NOT S12
S19
```